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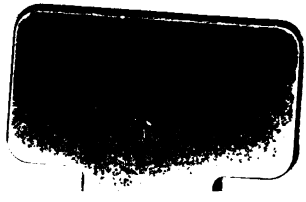

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From
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MAN A CREATIVE FIRST CAUSE

Two Discourses

DELIVERED AT CONCORD, MASS., JULY, 1882

BY

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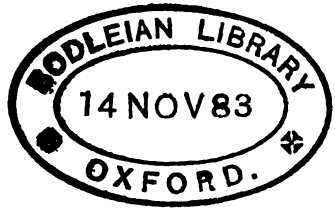

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PREFACE.

In these discourses I have intended briefly to present the leading results of previous investigations, most of which had already been published; but more especially to vindicate metaphysical science from the charge of being unfruitful, by showing that in its proper application to the subject of its investigation, it is susceptible of the highest practical utility.

I have endeavored to show that, to say nothing of the invigorating exercise of such study, it may be a means of making the same amount of intellectual power more effective, by the invention or discovery of better methods in its application; and further, that in this its own proper realm, — the realm of the spirit, — it may achieve a yet higher utility, a utility transcending all other, in creating, moulding, and elevating the moral character. I have also pointed out some modes in which the creative powers of mind may be successfully exerted for these objects.

Peace Dale, Rhode Island,
September, 1883.

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FIRST DISCOURSE.

MAN A CREATIVE FIRST CAUSE.

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It is conceivable that we might have knowledge only, but we could not have feeling without knowing it. We might have knowledge and feeling without will, but will without these would be dormant and merely potential. An unintelligent being cannot be *self-active*. Our sensations are not dependent on the will, nor is our knowledge. The truth is often apparent without effort. The additions to our knowledge are always *simple immediate mental perceptions*. Feeling (sensation and emotion) incites to action, but is not itself active. Knowledge enables us to direct our efforts, but is itself passive. By will we produce change and thus act as cause. Our own will is the only cause of which we are directly conscious. Means

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We know matter only as an inference, from the sensations which we impute to its agency, and these are not conclusive as to any such external existence. The phenomena are all as fully accounted for, on the hypothesis that they are the thoughts and imagery of God's mind *directly* impressed upon our own. In either case it is the expression of his thought, and to us equally real. Matter and spirit are still contradistinguished. The ideal hypothesis is the more simple and more nearly in accord with powers we ourselves exert. We can ourselves create such imagery, and to some extent make it durable, and palpable to others. But we find no rudiment of power in these creations of our own, and no reason to suppose that any increase of power in the creator of them could imbue them with any. If matter exists, being inert, it can have no power to change itself, and even if endowed with power to move, being unintelligent, it could have no tendency to move in one direction rather than another. Such power of self-movement would be a nullity, and matter can only be an instrument which intelligence uses to aid its efforts. Against these arguments it may be said that matter has always existed and was always in motion, as intelligence, with *its* activity, is presumed to have had no beginning. To assume the existence of both when one is sufficient is unphilosophical, and the spiritual should have precedence. It is inconceivable that matter, which does not know, should create spirit, which does know; while it is quite conceivable that spirit should create all we know of matter. But whether matter, even if in motion, can be a cause or power, depends upon this question, — if left to itself and the moving power withdrawn, would it stop or continue to move? If its tendency is to stop, it could not even be an instrument for conserving or extending the effects of other power. Power could not make matter self-active, or the subject of government by law. Quiescent it could only be acted upon 6

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This has been a prominent question for ages. It has been obscured by erroneous notions and defective definitions of will and freedom. Defects in Edwards' definitions of these terms and the consequent fallacies in his results. Will is the faculty of *effort*. An act of will is an effort, a trying to do. Freedom as applied to willing is *self-control*. The object of every effort must be to make the future different from what it otherwise would be. This is the only conceivable motive. A being with a faculty of effort, want to incite, and knowledge to direct it, is a self-active being; could act if there were no other power or activity. The will cannot be directly controlled by any extrinsic power. The only way it can be influenced is by changing the knowledge by which the being directs its act of will, and this would not avail if the being did not will freely. The notion of a coerced will, and the expression for it, are self-contradictory. It *is willing* when we are *not willing*. The future is always the composite creation of the free efforts of all conative beings acting as independent powers in the universe. The action even by the lowest order may influence the action of the highest. This inter dependence of the action of each

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SECOND DISCOURSE.

MAN, IN THE SPHERE OF HIS OWN MORAL NATURE, A SUPREME CREATIVE FIRST CAUSE.

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That the additions to our knowledge are simple immediate perceptions, not dependent on the will, gives them the character of the phenomena of sensation, and indicates the existence of a *cognitive sense*. Some of these increments do not and others do require preliminary effort. In this there is no difference *per se*, as to our perceptions of the external and internal. Intuitive perceptions are distinguished from the rational by the preliminary effort for the latter. We distinguish the perceptions of the cognitive sense as objective, seeing, hearing, etc., and subjective as the sense of beauty, justice, shame. And when right or wrong is the subject of it, it is the *moral sense* 47

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which we have associated with words. In this primitive form we can think of, and examine them and their relations, and a not uncommon belief, that we can think only in words, is erroneous. Or we may substitute words for these primitive perceptions, and then investigate the relations among the substituted words. In the difference in these two modes we find the fundamental distinction between poetry and prose, and also in the two cardinal modes of seeking truth: the former being the ideal or poetic; the latter, the logical or prosaic. The material universe, in the imagery of which God has inscribed his thoughts and conceptions, is the pure and perfect type of the poetic; while the prosaic or logical is very accurately represented in the solution of algebraic equations. The poetic mode has the greater reach, and is the most efficient truth discovering power. It is an essential attribute, but is not limited to men of genius. In its least ethereal forms it is the basis of common sense, and the main element of practical business ability. It is also the characteristic of what has been termed a woman's reason, giving to her quick and clear perceptions 53

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experience, and in some respects have the advantage of it. We cannot directly will change in our mental affections. The recurrence of our spiritual wants is as certain as that of the physical. As a man cannot do moral wrong in doing what he believes to be right, his knowledge though finite is infallible as to what is morally right for him. In castle-building we discard the external, and work from our internal resources, and may conceive a material universe or a pure and noble moral character.

The persistent effort to actualize these ideals is their final consummation. There can be no failure except the failure to will, and mind is here a Supreme Creative First Cause.

In the permanent engrafting of these ideals upon the character, habit performs a very important part. We must distinguish between the mere knowledge of what is desirable and the effort to attain it. A man may know that it is best to be pure and noble, and yet not only make no effort, but be unwilling to become so. To become good without one's own effort is an impossibility . . . 63

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The nature of the effect makes no difference to the moral quality of the effort. The consequences of one's actions may be really pernicious when his intentions are virtuous, and may be beneficent when his designs were vicious. A man who is honest for gain will be dishonest if the gain thereby is sufficient. Virtue is not reached till he acts from a sense of right and duty, nor established till he values moral beauty and purity above all other possessions and all possible acquisitions. No moral wrong can be charged to a man for an event in which he had and could have no agency. There is no present moral wrong either in the knowledge or in the exciting want now in

his mind, nor in the acquisition of that knowledge which he passively acquired. There is no moral wrong in the recurrence of our natural wants — though there may be in our willing to gratify them, or in the time or manner of doing this. Hence the *moral right and wrong* is all concentrated in the act of will — our own free act. A man can be good or bad only by his own agency — his own willing. Through habit memory performs the same office for action that it does for knowledge — retaining what is acquired, and thus leaving the mind at liberty for new acquisitions. We cannot directly will not to think of a thing, but we can discard the thoughts of it by willing to think of something else, and can do the same as to a want. This especially as to *moral* wants. If any one of these is eradicated, there can be no corresponding volition. By thus giving some of our internal wants a predominance we influence our moral characteristics at their source 72

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§ 25. Systematic Moral Training in the Formation and Study of Ideal Constructions.

This much needed to counteract a social system based largely on selfishness, and to neutralize the materialistic comfort-seeking proclivities of this mechanical and commercial age. But ideal constructions have been discouraged and stigmatized as idle imaginings, leading to groundless hopes and illusive views of life. Relieving these processes from such obstruction would be an important gain, and might be supplemented by education making ideal constructions a subject of study. For this there is encouragement in the fact that woman, to whose care the infant intelligence is first confided, is by her special endowments so fully equipped for this work . . 86

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By a constitutional provision our wants, physical and spiritual, recur without preliminary effort. Our æsthetic tastes are continually touched by the beauty and grandeur of God's visible creations. Man is thus reminded that there is within his own being an inchoate universe equally boundless, and which is his especial sphere for the exercise of his creative powers, requiring his effort to reduce it to order and to cultivate it into beauty. Constructing this universe within is the principal if not the sole end of life 97

DISCOURSE I.

MAN A CREATIVE FIRST CAUSE.[1]

§ 1. In the preface to "Freedom of Mind in Willing" I have spoken of the general indifference to metaphysical pursuits; attributing it, in part, to the more easily appreciated discoveries in physical science, and their immediate contributions to our material comforts. The inventions, by means of which these comforts have been so largely increased, are the result of the application of the intellect to the study of matter. But if, as I have suggested, the study of the mind may elicit practical modes of increasing the efficiency of the intellect, then this study, which thus improves that which achieves all other improvement — which invents inventive power — may, even in its relation to the most materialistic utility, become the first and most important factor.

This, however, is merely incidental to the higher purpose of increasing the mind's power for the discovery of truth generally, to which it should be subordinated and made subservient.

[1] See Note 1.

But beyond and above all such comparatively groveling application to our bodily wants, which philosophy once disdained, — beyond and above even the increase of intellectual power, — I hope, in furtherance of what I have heretofore suggested, to show more fully that the special field of *metaphysical utility* is in our moral nature; that every one has within himself a domain, as illimitable as that of the external, in which to exert his energies in the construction of a moral universe; and that within this domain, the finite intelligence is not only a creative, but a *supreme* creative power, and that therein, by the exercise of its faculties upon itself, it may devise or discover and impart new modes of forming and moulding the moral character, and thus supply a demand which, always important, has now, by our progress in other directions, become the prominent and urgent necessity of our time.

§ 2. The mind, like all other objects of its knowledge, is itself known only by its properties. These, as directly revealed in consciousness, are Knowledge, Feeling, and Volition. It knows, feels, and wills. In knowing or in feeling it is not active, but passively perceives and feels. The will is its *only real faculty*. By this alone it acts. An act of will is simply an effort of the mind — an effort of the intelligent being — to do.

When we speak of an effort of memory, or imagination, or judgment, we only mean that we make effort to remember, to imagine, or to judge. We distinguish the particular effort by its object or design. But the effort is *by* the intelligent being, and the whole intelligent being acting as a unit; and when we speak of bodily effort we do not mean an effort made by the body, but the mind's effort to move the body; and by mental effort the mind's effort as to its own movement or action. The characteristics, then, of which we are conscious in our own minds, are a *capacity for knowledge*, a *susceptibility to feeling*, and a *faculty* of *effort or will*. And such seems to be the constitution of every intelligent being of which we are cognizant. They all know, feel, and make effort.

To these attributes there is, as to each in itself, no conceivable limit. Having the want, and the knowledge or idea of a possible mode, the effort — the *trying to do* — is always possible. Nor can we conceive of there being in the nature of the phenomena any limit to our susceptibility to an additional sensation or emotion, or that our capacity for knowledge should be so filled that there would be no room for more. The internal capacity is as unlimited as external space.

§ 3. It is conceivable that a being might have

knowledge only; but it could not have feeling without knowing it. It might with knowledge have feeling, and enjoy or suffer without will — without any faculty or power by which it could change, or even try to change, its states of enjoyment or suffering, however well it might know that such change would be beneficial, or however decidedly it might *choose* or ardently *desire* such change.

It may seem to be conceivable that a being might have will without knowledge or feeling, that it might have the faculty and ability to try to do, and even the power to do; but such faculty would be dormant, and such power would be merely potential. Without feeling there would be no occasion, no inducement, no purpose, or motive for its exercise, and without knowledge no means of knowing or of directing its effort to an object.

If it be conceivable that such being could have a potential faculty of action, its tendency to act must be equal in all directions, and all tendency to action would be neutralized. An unintelligent being cannot be *self active.*

Our sensations and emotions are not dependent upon our will. We can neither hear nor avoid hearing the sound of cannon by an act of will.

By effort, we may bring about the conditions precedent to a particular sensation or emotion; but whether they are brought about by our own act or by other cause makes no difference to the effect.

Nor is our knowledge subject to our will. We may, by effort, bring about the conditions essential to our knowing. We can remove an external obstruction to sight, so as to see what was hidden by it. And we can also by effort call up and arrange our ideas so that some new truth will become apparent; but in neither case can we will *what* we shall perceive.

But the truth may be, and often is, apparent without any prior effort, by merely observing things as they happen to be. But whatever preliminary efforts we may make to bring about the prerequisite conditions to our knowing, the additions to our knowledge are always *simple immediate mental perceptions*, separable from the effort, and in its essence as independent of it as the smell of musk or brimstone is of the movement of the hand which brings it to the nose.

Feeling (i. e., sensation and emotion) is an incentive to action, but is not itself active.

Knowledge enables us to direct our efforts, but is itself passive.

Through its only active faculty of will — its

effort — the intelligent being strives to produce *change*, of which, when effected, it is the *cause*.[1]

Our own individual effort is the only cause of which we are directly conscious, but we are directly conscious of changes in our own sensations, for some of which we have and others we have not made effort. From some of these sensations we infer objective material changes, some of which we have and others we have not caused. From some of these we also infer the existence of other intelligent beings, like ourselves, to whose action we attribute many of these changes in our sensational or in objective phenomena, which we have not ourselves produced. But as some of these changes require a power beyond any indicated in ourselves or in our fellow-beings, we infer the existence of a superior intelligent power adequate to their production. We thus come to know ourselves, our fellow-beings, and God as cause.

§ 4. Of the existence of matter or of its properties we are not directly conscious. We know nothing of it except by the sensations which we impute to its agency, and as these sensations can exist in the mind in the absence of the external material forms or forces to which we impute them, e. g., in dreams, the sensations are not con-

[1] See Note 2.

clusive evidence of any such external existence. All our sensations which we attribute to matter are as fully accounted for by the hypothesis that they are the thought, the imagery of the mind of God directly imparted or made palpable to our finite minds, as by that of a distinct external substance in which He has embodied this thought and imagery.

In either case matter is but the expression of his thoughts and conceptions. In either case, too, it is to us equally *real*, the sensations by which alone we apprehend these to us external phenomena being the same.

In either case, too, spirit and matter are still antithetically distinguished, as that which sees and that which is seen: the one having the properties of knowledge, feeling, and volition, while the other is unintelligent, senseless, and inert.

The hypothesis that the material phenomena are but the thoughts and imagery of the mind of God *immediately* impressed upon us is the more simple of the two, and makes creative attributes more nearly accord with powers which we are ourselves conscious of exercising.

We can ourselves by effort create such imagery, and to some extent make it durable and palpable to others.

We, however, find no rudiment of force or causative energy in these creations of our own. We can no more attribute inherent power to them than we can to an image in a mirror, and there seems no reason to suppose that any increase of power in the creator of such imagery could imbue it with causative energy.

On the other hand, if the existence of matter as a distinct, independent, objective entity is conceded, it may still be urged that it can, within itself, have no causative power. If wholly quiescent it could exert no power to change itself, for all change in matter is by its motion in masses or in atoms; and matter cannot move itself.

But it does not appear to be claimed that matter except when in motion can be regarded as a power. It is inert and has no self-active power by which it can begin motion in itself without being first acted upon, nor can it determine the direction of its own motion. This beginning and determination must therefore be by the only other possible cause — by intelligent being — and that which thus begins and directs the motion is properly the cause of all the effects which follow, and matter is only an inert instrument which intelligence uses to produce these effects.

Even if it could be endowed with power to move

it could have no inducement, no tendency, or means to determine its motion in one direction rather than another; and a tendency or power of self-movement which is equal in all directions is a nullity.

Its quiescent existence might be a fact perceived by intelligent beings as among the conditions for them to act upon, but any change thus wrought in such being is the result of its own perception, or its own action on the quiescent matter. Clay may be moulded; it cannot mould.

It may, however, be urged that both the arguments thus drawn from the difficulty of conceiving of the creation of matter as a distinct entity, and from the necessity of motion, which it cannot begin, to its causal power, may be met by the hypothesis that matter never was created, but has always existed, and that its condition has ever been that of motion; and that this involves no more difficulty than the hypothesis that intelligence with *its* activity has had no beginning.

On this we would observe, as germane to the whole question of intelligent or material causation, that to assume the existence of both when one is sufficient is unphilosophical; and that as we are *directly* conscious of the spiritual phenomena, and only *infer* the material from our sensations,

those who set up the material against or to the exclusion of the spiritual are impeaching testimony by testimony less reliable than that which they impeach. And, further, it seems inconceivable that matter should be the cause of intelligence and its phenomena — that what does not itself know should create a power to know — while, as already shown, it is quite conceivable that intelligence may create all that we know of matter and its phenomena. These considerations seem to furnish sufficient reason for discarding the hypothesis of causal power in matter.

But whether matter, if it exist, can, even if in motion, be a force, power, or cause, still depends on another question, viz., Is the tendency of a body in motion to continue to move, or to stop when the moving power ceases to act upon it? In other words, is the application of extrinsic power required to keep it in motion, or is such application required to stop it? The problem may be thus stated. Suppose all existence was comprised in one power and one ball, and that this power was directly moving that ball. If this power was instantaneously annihilated, would the ball continue to move or would it stop?

If in virtue of being in motion it has power, it still could not select or vary its action or its conse-

quences, and all its effects must be of necessity. For instance, in the collision of one body with another, as both cannot occupy the same space, some effect must result. All the effects of unintelligent cause must be from some like necessity. In this respect the material hypothesis would have the advantage, there being no apparent connection of *necessity* between intelligent effort and its objective sequences. If matter has such tendency to continue its motion, then it could be used by intelligent power as an instrument to extend the effects of its own action in time and space. But if its tendency is to stop, then it can have in itself no power or force whatever, and could not even be an instrument for thus extending the effects of the power that put it in motion. I confess myself unable to make or find any solution to this radical question, but until it is settled I do not see how matter, though in motion, can properly be regarded as a force, or even as a conserver of force imparted to it by other power.

Nor could intelligent power make matter a self-active cause, capable of beginning to move, of directing its movements, and so conforming them to varying circumstances and conditions as to produce a particular effect at a particular time, by impressing upon or imbuing it with laws for its

own government: for to be thus governed by law presupposes *intelligence* on the part of the governed; such government of that which has no intelligence involves a contradiction which power cannot reconcile. All that can properly be implied when we refer an event to "the nature of things," or to the "laws of nature," as its cause is that the intelligence which causes these events acts uniformly. In investigating the *laws of nature* we but seek to learn the uniform modes of God's action.

§ 5. A very popular notion of cause, adopted by many eminent philosophers, is that all events or successive phenomena are connected in a chain of which each successive link is the effect of all that preceded it. These also hold, as an essential adjunct to their theory, that the same causes necessarily produce the same effect, and hence that each of these successive events is necessitated by those which precede it. J. Stuart Mill, one of the able advocates of these views, says:[1] —

"The real cause is the whole of these antecedents;" and again, "The cause . . . is the sum total of the conditions positive and negative taken together; the whole of the contingencies, which being realized the consequent invariably follows."

[1] *System of Logic*, Book 3d, Chap. 5, § 3.

On these and other similar positions of Mill, and the materialistic school generally, I will remark that they do not distinguish between those antecedents which are merely passive conditions to be acted upon and changed and the active agents which act upon and change them; do not distinguish what *produces* from what merely *precedes* change. Life is a prerequisite to death, but cannot properly be regarded as a cause of it.

Again, any cause always acts upon a wholly void and therefore homogeneous future, and if the cause is the *whole of the antecedents*, then, as at each instant the whole of the antecedents is *everywhere* the same, the *effect* would everywhere be the same; and throughout the universe there could be only one and the same effect at the same time.[1]

It is also obvious that on this theory of the "whole antecedents" there can be no possible application of the law of uniformity, that "the same causes produce the same effects;" for the moment the cause — the whole of the antecedents — has once acted, its action and its effect are added to and permanently change it, and the

[1] For a fuller statement of this argument see *Letters to Mill on Causation and Freedom in Willing*, p. 56; and the first of these letters as to cause generally.

same cause can never act a second time. The advocates of this theory, that "the whole antecedents are the cause," and of the asserted law that "the same causes must produce the same effects," also very generally hold that we get all our knowledge from experience. But it is clear that if the theory is true there can be no experience as to the law, and hence, on their theory, no knowledge to justify them in asserting it.

The foregoing results warrant the assertion that in the present condition of our knowledge the only causative power which we can be said to know, or which we can properly recognize, is that of intelligent being in action, and that all the effects, and especially all the uniform changes in matter, which begin to be, must be attributed to such action, and of course such of them as are not caused by the inferior must be referred to the action of the Supreme Intelligence; that, however difficult the conception, there seems to be no way to avoid the necessity of this constant exercise of creative energy to begin change, and produce uniformity in the results, or to escape the conclusion that every particle that floats in the breeze or undulates in the wave, every atom that changes its position in the uniform modes of electrical attraction and repulsion or of chemical

affinities, is moved, not by the energizing, but by the energetic will of an Omnipresent Intelligence.[1]

§ 6. The question of our freedom in willing has for ages been a prominent subject of philosophical inquiry and discussion, in which much of the diversity in opinions and results seems to have arisen from erroneous notions and defective definitions of will, and of freedom as applicable to willing.

Effort is wholly unique. Through the whole range of our ideas there is nothing resembling it — nothing with which there would seem to be any danger of confounding it, or of mistaking it. And yet, as to the noun, will, which I regard as merely a name for our faculty to make effort — to try to do — there is much confusion, ambiguity, and error.

In the first place, the will has sometimes been treated as a distinct entity. This finds expression in the phrase, freedom of the will, and opens the way for the argument that if this distinct entity can be controlled by some power extraneous to it, even though by the being of which it is an attribute, then the *will* is not free.

Such reasoning is wholly precluded when we

[1] See Note 3.

regard the will as simply the faculty or ability of the mind to make effort, and an act of will as simply an effort of the mind to do, and in accord with this view, speak of the freedom of the *mind* in willing, instead of the freedom of the *will.* Edwards, in his celebrated argument for necessity, defines WILL to be "*that by which the mind chooses anything,*" and says "*an act of the will is the same as an act of choosing or choice.*"

In my view the will is that by which the mind *does* any and every thing that it does at all, or in the accomplishing of which it has any active agency. Limiting its function to the phenomena of choice seems to me peculiarly unfortunate. Our choice is merely the *knowledge* that one of two or more things suits us best; and, as we have just shown, knowledge cannot be determined by the will. We may, as in other cases, by effort — by comparing the respective advantages of the several objects of choice — bring about the conditions essential to our knowing which suits us best. The object of the comparative act is to get this knowledge; but the knowledge as to what suits us best — the choice — is itself a fact found, not made or done by us. It is an immediate perception to which the previous efforts, comparative or otherwise, may have been necessary.

Edwards also says, "The obvious meaning of the word FREEDOM, in common speech, *is power or opportunity of doing as one wills.*" But as applied to willing — the *willing* being then the *doing* — this is merely saying that freedom is the power to do as one does, or to will as one wills, or, if the doing (as we will) applies to the realization of the object of our effort, then it makes our freedom in making the effort depend on the subsequent event, which is absurd. It makes our freedom to *try* to do, dependent on our *power* to do. But we may freely make effort — try — to do, what the event proves we have not power to do.

In this popular use of the word freedom, it applies only to the *doing*, which comes after the *willing*, and is but a synonym for power. Freedom in its more comprehensive sense, and as applied to intelligent being, is simply SELF-CONTROL. Freedom in willing does not imply that the mind's effort is not controlled and directed, but that it is controlled and directed by the being that makes the effort, and is not controlled or coerced by extraneous power.

The consequences of these defective definitions of will and freedom upon the argument are obvious; e. g., Edwards makes choice and preference

identical, and also says, "to *will* and to *choose* are the same thing." It will be generally admitted that our choice as mere preference is not a matter which we can control, that we cannot, *per se*, prefer pain to pleasure, and hence are not free in choosing; and then on Edward's assumption that choosing is the same as willing, he logically infers that we are not free in willing.

If we may properly define will as but a faculty to make effort, and an act of will as simply an effort, and discard the assumption that will and choice are the same, these arguments for necessity are eliminated. Leaving for the present the consideration of other arguments for necessity, we will turn to some of the sequences of the foregoing premises.

And first, it is evident that no power can change the past, and that the object of every intelligent effort must be to make the future different from what but for such effort it would be.

This is the only conceivable *motive* to effort. Now, intelligent being, constituted as before stated, has through its feelings an inducement to make efforts to so mould the future as to obtain an increase of those feelings which are pleasurable and avoid or lessen those which are painful; and by means of its knowledge it can distinguish

and judge, more or less wisely, between these feelings, and also determine by what efforts it will seek to thus mould the future.

Such a being is in itself self-active, requiring no extrinsic agency to put it in action, or to sustain or direct its activity. How such a being came to be, whether in some inconceivable way it sprang into existence from nothing, or in some manner equally mysterious has been evolved from matter or other preëxisting substance or essence, the genesis of which is no less inscrutable, is not material. A being so constituted has all the elements of self-activity.

Supposing it to have just come into existence, with no other coexisting power in action, it could, on *feeling* some want and *knowing* some mode of effort by which to gratify its want, immediately make the effort; e. g., in the midst of a universal passivity, a being thus constituted could relieve its hunger by plucking and eating the fruit at hand, and such effort, in the absence of all other power, would of necessity be self-controlled and directed, and therefore the free effort or willing of the being that put it forth. In the passive and inert conditions the *intelligent* being perceives a *reason* for acting, and for acting in a particular way; but such acting suggested by and

conformed to its *own* perception, which is wholly in itself, is very different from an action coerced by or directed by an extrinsic power, and this difference gives to the former the distinguishing characteristic of freedom, i. e., *self-control.* Intelligent effort, then, and there is no other, thus springs directly from an internal perception of a *reason.* In this reason it has its genesis, and is not dependent on the prior action of any extrinsic power or cause.

But further, if there were other coexisting conative beings or powers, we know of no mode in which the willing of one being can be directly changed by the willing of another or by any other extrinsic power whatever. The willing so controlled would be the willing of this other being or power, and not that of the being in which it is manifested.

But a constrained or coerced willing, a willing which is not free, is not even conceivable. The idea is so incongruous, that any attempt to express it results in the solecism of our *willing* when we are *not willing.*

In conformity with these views we find the fact to be, that whenever we would influence the willing of another, we always try to do it by changing his knowledge. We may seek to do this by sim-

ple presentation of existing facts, or by argument upon them; or we may exert ourselves to change the facts, — the conditions upon which he is to act; e. g., we may interpose insuperable obstacles to his intended action, or we may directly produce or change the feelings which prompt his action. But as any such actual change of the conditions is wholly ineffective till it makes a part of his knowledge, these apparently two modes are really only one, and it comes to this, that our only mode of influencing the willing of another is to change the knowledge by which he controls and directs his own willing; and it is evident that this mode is effective only upon the condition that this other does direct and control his own willing and conforms it to his own knowledge.

It would be absurd to suppose that the conforming of the act of will to the knowledge of the being that wills is by an extrinsic power.

It comes, then, to this, that the only conceivable mode of influencing the will of another is by changing his knowledge, and that this mode is wholly unavailing if this other does not direct his own action by means of his own knowledge, i. e., if he does not will freely.

From these premises it follows that our willing not only may be, but must be free. From these,

too, it follows that every being that wills is a creative first cause, an independent power in the universe, freely exerting its individual energies to make the future different from what it otherwise would be.

The creation of this future, for each successive moment, is the composite result of the efforts of every being that wills. Whatever its grade of intelligence, if it makes successful effort to produce change, it so far acts as an originating creative cause in producing the future.

Again, as every intelligent being will conform its action to the existing conditions to be acted upon, the change in these conditions which is effected even by the lowest order may affect the action of the highest. Each individual acts in reference to his prophetic anticipations of what the future will be without his action, and what the effects of his action upon it will be, including in these effects the consequent changes in the knowledge and action of others.

This *inter*dependence of the action of each upon that of others without interference with the freedom of any may be illustrated by the game of chess, in which each of the players alternately makes new conditions, new combinations, for the *free* action of the other, and this each in turn does

with reference to the moves which may follow. They could so play if there were no other power in existence, and each was wholly passive while the other was determining his move, which in such case must be wholly determined and controlled by the party moving, and hence would be his free act.

This equal and perfect freedom of all does not impair the sovereignty of the Supreme Intelligence.

Edwards argues that if the Supreme Intelligence did not foreknow human volitions he would be continually liable to be frustrated in his plans. But Omniscience could at once perceive what action was most wise, or, even if prevision was essential, could search out and be prepared for every possible contingency. It is *conceivable* that a man could do this in the game of chess, and there are games which, though inexplicable to the uninitiated, may practically be so investigated that the best move in every possible contingency will be ascertained, and, in which, with the advantage as to the first move, success will be certain to one having this superior knowledge, though he may not foreknow a single move of his opponent.

§ 7. The phenomena of instinct have been very generally deemed exceptional. Our own conscious

agency in them is so slight that it escapes ordinary observation.[1]

The well ascertained fact that animals at their birth perform instinctive actions, without previous instruction or experience, furnishes a clue to the solution which brings these phenomena into harmony with all other *voluntary* actions. It indicates not that the *will*, the voluntary effort is absent, but that the *knowledge* by which we direct it is *innate.*

In every intelligent conative being the knowledge that by *effort* it can move its muscles must be innate. There is no conceivable way in which the being could itself acquire this knowledge. No movement of its own muscles, without self effort, could suggest the idea, and it would never discover any connection between the movement of the muscles of another and effort. No such experience or observation of the phenomena of muscular movement has any tendency to elicit or suggest the idea of effort.

But, so far as our observation goes, every animal, man included, is born with this and some additional knowledge which is essential to the preservation of its life. The kid the moment it is born can rise upon its feet and go directly to

[1] See Note 4.

the source of food which its mother supplies, and it or the human infant would die of hunger before it could empirically learn the complicated muscular movements and the order of their succession which are required to avail itself of its food.

If there is any *self activity* prior to birth, it still more strongly indicates that the knowledge of some of the modes by which we subsequently act is innate.

In all cases requiring more than one muscular movement, we must will such movements in a certain order. It would be in vain to make the muscular movements by which we swallow, before the food was in the mouth. There must be a *plan* of action. If no such *plan* is already a part of our knowledge, we must devise one. Having such plan in our mind, we at once proceed to execute it by the appropriate efforts. In the rational action we ourselves devise the plan. In the instinctive we work by a plan we found ready formed, innate in the mind.

When we have devised the plan of rational action, and can remember the successive steps, and apply it by rote without reference to the rationale, it becomes a *plan ready formed in the mind*, and the action becomes *habitual*. In such

action the process is precisely the same as in the instinctive. The popular consciousness of this similarity finds expression in the common adage, "Habit is second nature."

In both cases we act from a plan ready formed in the mind which we apply without any present labor in constructing it; and without the premeditation and deliberation required in this process.

The rational, the instinctive, and the habitual actions, then, all come under our general formula, and are all *efforts of a conative being, incited by its want and directed by its knowledge to the end sought.*

In our rational actions we have obtained the knowledge of the mode or plan of action by our own efforts. In the instinctive, we found it ready made in the mind without effort of our own.

In the habitual, the plan, though we may have originally formed it ourselves, has become so fixed in the memory that for all subsequent action it becomes a plan *ready formed in the mind*, requiring no new effort to reconstruct it.

In all this it is the being directing its effort to the end desired by means of its knowledge.

In the execution of this *plan*, it is obvious that the mode in which we get the knowledge of it

can make no difference as to the process by which we execute it; and hence the difference between instinctive and rational actions has been vainly sought in the actions themselves.

There is no difference in the actions, nor in the knowledge itself, nor in the application of the knowledge to direct our efforts, but the distinction is a step farther back, in the *mode* in which we become possessed of the knowledge we thus apply.

As, in the rational actions, the main labor and difficulty, that which tasks our ability, is the forming of the plan of action, the fact that in the instinctive action this plan is ready formed in the mind accounts for the spontaneity, the absence of deliberation, which is one of the most marked features of instinctive actions, and the very little which is left for us to do causes us to overlook our own agency and to refer such actions to an extrinsic power, and hence to regard them as not self-controlled and not free. This mistake in ignoring our own agency also opens the way for the further error that instinctive actions are purely mechanical, which many philosophers of great reputation have asserted. But mechanism is not in itself power. It is only a means by which power is applied.

In regard to those habitual actions which we do by memory of plans of rational actions, if we should forget that the plans for them were originally formed by our own efforts we should know no difference between them and the instinctive actions.

These views seem to account for all the peculiarities of instinctive actions, and, if they are correct, instinct is not a distinct faculty, property, or quality of being that may be put in the same category and compared with or distinguished from reason, but has relation only to the mode in which we became possessed of the knowledge by which we determine our actions. In regard to the instinctive, this knowledge being innate, we have no occasion to use our reason to obtain it. Hence instinct is often regarded as fulfilling the function of reason.

Whether the innate knowledge of modes and plans is by transmission or otherwise does not affect our theory. The fact that they are thus ready formed in the being without effort of its own seems to be assured by actual observation, and to be sufficient to explain all the peculiar phenomena of instinctive action.

The genesis of our action must be instinctive, founded on innate knowledge, there being no pos-

sible way in which, through experience or reflection, we could ever learn by effort to put either our muscular or mental powers in action.

The instinctive actions are of the same character in all grades of being; and in regard to rational actions I see no distinction in kind, but only in degree, between those of man and the lower animals. Descending in the scale of intelligence we will probably reach a grade of beings which do not seek to add to their innate knowledge, nor invent or form new plans to meet new occasions for effort.

The actions of such must be wholly instinctive, but I have seen dogs and horses draw inferences and work out ingenious plans of action adapted to conditions so unnatural and improbable to them as to preclude the assumption that they had been specially provided by nature, through hereditary transmission or otherwise, with the knowledge of the plan they adopted for such exigency.[1]

In regard to habit I would further state that it is but a substitution of former results of investigation and experience for present examination and trial. Through it memory performs the same office for action that it does for knowledge, retaining the acquisitions of the past for permanent use.

[1] See Note 5.

If on every occasion for their application we had to re-learn the letters of the alphabet, there could be very little progress in general knowledge, and so if on every occasion for action we had to devise or examine and decide as to the best plan, we should make very little progress in acquiring modes of action or facility in their application. By these conserving agencies the mind garners what is matured, and is ready for new acquisitions.

The agency of habit in retaining previously considered modes of action, right or wrong, and making them permanent accretions to the moral character is its most important function.

Having now shown that these apparently exceptional cases of instinctive and habitual actions are really embraced in our general formula, that all our actions are efforts, self-directed by means of our knowledge to the gratification of a want, and consequently are free, I will note some of the conflicting views of the advocates of necessity.

I have already alluded to the fallacies which grow out of regarding the will as a distinct entity, and from the erroneous definitions of it, and of freedom, and also from identifying the latter with choice.

§ 8. But the argument from cause and effect seems to be most relied upon by necessarians.

I adopt a statement of this argument which has the assent of one of its most distinguished advocates, viz.: If all the circumstances in a thousand cases are alike, and the conditions of the mind also the same, then the willing will be the same, and this uniformity indicates necessity.

This assumes as the basis of the argument that the same causes must produce the same effects.

In the first place I would remark that an intelligent self-active cause is under no necessity upon a recurrence of the same circumstances to repeat its action, but having in the first case increased its knowledge, it may act differently in the second.

It may with reason be said that with this increase of knowledge the conditions of the mind are different, but if this difference is not tacitly excepted, the hypothesis of a thousand like cases is inconceivable, inasmuch as there could not even be two such.

But giving the argument all that is intended by those who urge it, and granting their assumption, that the same causes do of necessity produce the same effects, let us suppose the circumstances in one thousand cases to be alike, and the conditions of the mind at each recurrence of them to be the same, and that one of these conditions of the

mind is that of *necessity*, then the same causes of necessity producing the same effects, *the same action follows.*

Again, suppose the circumstances in another thousand cases to be alike, and the conditions of the mind again the same in each case, but that in these, one of the conditions of the mind, instead of being *necessity*, is *freedom*, then the same causes of necessity producing the same effects, *the same action follows.*

Now, as the result is in both cases the same, it cannot possibly indicate whether it is necessity or freedom that is among the conditions, and it proves nothing.

One phase of this argument from cause and effect is that all the present events, including volitions, are necessary consequences of their antecedents. I have already treated of this asserted dependence of the present on the past, and will now only add that intelligent action is always wholly upon the present conditions, and has reference solely to an effect in the future, and it is not material to such action how or when either the active being, as he is, or the conditions for him to act upon, came to be, or how connected with the past, nor whether they had any past. If, however, by the force of past events themselves, or by

any causes whatever, there is established a certain flow of events having a tendency to extend into the future, such flow in its effect upon our freedom in willing does not differ from that flow which is the composite result of conative efforts, which I have already considered. Our individual action is always to interrupt or modify such flow. We decide as to our own actions by our pre-conceptions, our prescience — more or less reliable — of what the future will be with, and what without, our own efforts.

§ 9. The influence of present external conditions is also much relied upon by the advocates of necessity, but I trust it is already obvious that we may vary our free action with the circumstances, that we act as freely upon one set of them as upon any other, and that such action being self-conformed is perfectly free.

The influence of internal phenomena, as the moral character, knowledge, disposition, inclination, desires, wants, habits, etc., which make up the attributes and conditions of the mind that wills, is also much relied upon, and necessarians have been at much pains to show that the willing is always in conformity to these. But in view of the fact that freedom, in the act of willing, consists in the action being self-controlled and

directed, it would have served the purposes of their argument much better to have proved that the action was counter to or diverse from the character. They seem to have been especially unfortunate in making successful efforts to prove that our actions are always in agreement with our prevailing choice, or, which with them is very nearly the same thing, with our strongest motive. The moral character of the being is indicated and represented by its efforts, but this manifestation through the efforts does not affect its freedom in making them. A demon is as free as an angel.

Nor is it material to the question of freedom how the being came to be as he is; whether his own character has been the result of his own efforts or of other power or circumstances; or whether his own knowledge, by which he directs his actions, has been acquired with or without extrinsic aid. The fact that his willing will vary with and conform to his character — his disposition and his knowledge — indicates that he controls his action. If he does not, then there is no reason to expect that his action will so conform.

§ 10. The advocates of necessity often ask if a man could will the contrary of what he does will. I would say that he could if he so decided; but it would be a contradictory and absurd idea of free-

dom, which for its realization would require that one might try to do what he had determined not to try to do. In short, all these arguments of the necessarians, that our acts of will are not free because they must conform to our own character, our own views and decisions, virtually assert that one is not free because he must be free; or, in other words, being of necessity free, he is *constrained* to be free, and hence is not free.

§ 11. Edwards and other theologians agreeing with him have regarded the argument from prescience of volitions, which they hold to be perfect in deity, as very conclusive. They assume not only that a volition which is infallibly foreknown must of necessity happen, but that it must happen by restraint or coercion of the willing agent. This is not a logical inference. Whether a free volition ever can be infallibly foreknown may be doubted. I think I have already shown that such foreknowledge is not requisite to the supreme sovereignty of the universe. But some philosophers, who in their inquiries exclude theology and revelation, also argue that the imperfect prescience, which must be an element in the decision of all our efforts to influence the future, also indicates necessity. Both hold that the possibility of prediction involves necessity as to the volition. But

if, as I hope to demonstrate, a free act is as easily foreknown and predicted as one that is not free, this argument is wholly unavailing. If some being by its power *controls* a future event, it of course can foreknow and predict it, but such control of the volition of another, for reasons already stated, I hold to be impossible, involving a contradiction which power cannot reconcile. Aside from this conclusion, the difference between a volition which is free and one which is not free is that the former is controlled and directed by the being in which it is manifested, and the latter by some extrinsic power. Our principal means of foreknowing what the self-directed, the free, act of an intelligent being will be is its conformity to the known character, habits, etc., of the actor; and if it is admitted that the external power which controls and directs the action which is not self-directed always conforms the act to the character of the being in which the action is manifested, then the probabilities of forming a correct judgment of what the action or effort will be are in this respect exactly equal. But the admission that this conforming of the action to the character of the actor is by an extrinsic power, and not by the actor himself, is an unwarrantable, I might per-

haps say an absurd, assumption. In stating it one can hardly avoid a solecism, for the character which is thus presented to us by the actions is not that of the being apparently acting, but of the power or powers which determine the actions. The actions in such case might represent as consistent character, for to the outside observer the actions make the character; but it would be the character, not of the being apparently acting, which we perceive or know, but of the being or power extrinsic to it which we may not know. All our knowledge of beings as individuals, and even of species, would thus be annihilated. The hypothesis of such extrinsic agency in conforming the action to the character of the actor is in various aspects of it a gratuitous and inadmissible assumption.

If it still be urged that the act may be controlled by an extrinsic power that does not conform the action to the character of the apparent actor, then if we do not know this extrinsic power we wholly lose our principal means of predicting what the action will be; and if we do know it, and know it without any effort, we still have to meet the same difficulties, somewhat more complicated by this extrinsic agency, to ascertain what this extrinsic power would determine this unfree act

of another to be, as we would to solve the question as to what the more direct and simple, self-determined free act of this other would be; so that on any admissible hypothesis the free act of will is (to all except an intelligent controlling power) more easily foreknown and predicted than one that is not free, and if this argument from the susceptibility to prediction has any weight, it is in favor of freedom and not of necessity.[1]

§ 12. I will now recur to the position before reached, that every being endowed with the faculty of will, a capacity for knowledge and a susceptibility to feeling, has within itself all the essentials of a self-active being, and can begin action, and, so far as it has *knowledge* of a mode, can make effort to produce any effects, and so far as it has *power* can actually produce them, without any extrinsic aid. Every such being is thus a creative first cause, an independent power in the universe, in a sphere commensurate with its knowledge, freely putting forth its efforts to change existing conditions.

The power and knowledge of such a being may be very limited; but within the limits of these attributes its action is as *free* as if it were omniscient and omnipotent. Its effort must al-

[1] See Note 6.

ways be to make the future different from what but for such effort, it would be. Such being is thus a co-worker with God, and with all other conative beings, in creating the future which is always the composite result of the action of all such beings.

If we suppose an oyster with no other efficient *power* than that of moving its shell, and with knowledge of only one mode of doing this, and this instinctive, still, when by its own effort, directed by its own knowledge, it effects this moving, it so far makes the future different from what it would have been, and so far performs a part in the creation of that future.

But I shall deal mainly with our own more intelligent order of beings, which not only knows, but devises modes of actions suited to the varying occasions of life, and in which the *creative* powers of effort, incited by feeling and directed by knowledge, are more abundantly manifested.

For the exercise of these creative powers we have two distinct spheres of effort, the one without and the other within us; that without us embracing all material phenomena, and so much of the spiritual as we attribute to other intelligent beings. All this sphere is known to us through our sensations and as an inference from them.

Of the phenomena of our own spiritual nature we are directly conscious. The phenomena without us are conveniently called objective, and those within us subjective. Our efforts to effect change in either sphere are always subjective. In efforts for objective change we always begin by a movement of our own muscles. We thus directly change the material status without us, and, as already shown, we may by such change in the external material conditions to be acted upon indirectly influence the free action of others. We can thus by our own efforts make objective phenomena, including the mental action and volitions of others, different from what they otherwise would be.

§ 13. I have already alluded to the two different hypotheses, the one regarding material phenomena as forms of a distinct entity, called matter; the other regarding it as but the thought and imagery of the mind of God immediately impressed upon and made palpable to our finite minds, without any intermediate vehicle in the process.

In either case the sensations, by which alone we know, or which perhaps are all there is, of the phenomena, are equally real, and are in fact identically the same on the one hypothesis as

upon the other. If as a result or corollary of our arguments in regard to cause, or otherwise, the material universe is regarded as the work of an intelligent Creator, working with design to produce a certain effect, then, upon either of these hypotheses, it is the presentation and expression of a conception existing as thought and imagery in his mind before he gave it palpable tangible existence in ours, and the only question as between the two hypotheses is, whether, in making it palpable to us, he transfers this thought and imagery *directly* to our minds, or does this by painting, carving, or moulding, in a distinct material substance.

I have already intimated my leaning to the ideal hypothesis as being more simple and equally competent to embrace and explain all material phenomena.

I will here remark that the adopting of one or the other of these two hypotheses has very little, if any, bearing upon the views which I am presenting: whether the Supreme Intelligence found the matter, in which he expresses and makes his thoughts permanent and tangible ready made, or made it himself, either as a distinct entity, or as mere imagery of his mind, has in most respects no more significance than the question whether

Milton and Shakespeare and Bacon found existing materials for expressing and making their thoughts palpable and permanent, or contrived and made the pen, ink, and paper, which they used for this purpose. In either case we get the thoughts of the author, and can use the same means to express our own, including even in some measure the visible creations in which the Author of all has communicated his thoughts.

Another consideration in favor of the ideal hypothesis is, that by means of it creating becomes more conceivable to us: we can any of us conceive or imagine a landscape and vary its features at will; this is an incipient creation, which by effort we may make more or less perfect.

Such creations of our own we for the time being locate outside of ourselves, and while we are wholly absorbed in contemplating them, they are to us perfect external material creations.

To make them such to *others* requires that we should in some way impress our conceptions upon their minds, and make the imagery of our own palpable to theirs. Though our faculty of doing this, as compared with that of creating the imagery, seems to be very limited, we are none of us wholly devoid of it. Landscape gardeners, ar-

chitects, sculptors, painters, and more especially poets, have it in marked degree. In all these it is effected by slow, tentative processes, though in the latter it often appears as a genuine spontaneity, a fiat of creative genius.

We then already have and habitually exercise all the faculties essential to material creation, and with the requisite increase in that of impressing others we could design and give palpable persistent existence to a universe varying to any extent from that which now environs us, which would be objectively as real and material to the vision, even, of others, as the heavens and the earth they now look out upon.

Though these creations of our own are mostly evanescent, and the persistent reality which with great labor and pains we give to some of them is very limited, and the presentation even of these very imperfect, still they show that we have within us the rudiments of all the faculties which on the ideal hypothesis are essential to creating. This hypothesis is further commended to us by the consideration that man having in a finite degree all the other powers usually attributed to the Supreme Intelligence, lacks under the material theory that of creating matter. Corresponding to the Divine omnipotence, omniscience, and omni-

presence, man has finite power and finite knowledge, and can make all the ideas and objects of his knowledge palpably present, which is equivalent to, and under the ideal hypothesis is identical with, a finite presence, limited like our other attributes to the sphere of our knowledge. The ideal hypothesis then rounds out our ideas of creative intelligence, relieving us of the anomaly of the creation of matter as a distinct entity, for which we have in ourselves no conscious rudiment of power and of which we cannot conceive, and we find little if any relief in the alternative that matter has always existed without having been created.

A legitimate inference from the foregoing premises seems to be that if from any cause one's own incipient creation of objective phenomena should become so fixed in his mind that *he could not change it at will*, it would become to him a permanent external reality. This inference is empirically confirmed by the fact that this sometimes happens in abnormal conditions of the mind.

However conscious we may be of our own agency in the formative process, as to the formations themselves, their subjection to our own will seems to be the only element by which we distinguish our own ideal creations from objective phenomena.

This strongly suggests that the difference between the creative powers of man and those of the Supreme Intelligence is mainly if not wholly in degree and not in kind, and that even in this the disparity, vast as it is, is still not so incomprehensible as has been generally supposed. This gives warrant to the logic in which by short steps we attribute all creations and all changes, which we regard as beyond our own power and beyond that of other embodied intelligences known to us, to a superior intelligence with the same powers which we possess and use to create and change, increased, we need not say infinitely, but to a degree corresponding to the effects which we cognize and ascribe to them.

I will further remark that so long as these creations even of the objective are purely subjective, there is no limit to the interest or the variety of our combinations. We are not confined to any experience of the actual nor constrained by any notion of propriety or harmony, but can make roses bloom in regions of perpetual snow, or locate a sun in the zenith of a nocturnal sky. Nor can we any more conceive of a limit to the extension of these incipient creations than we can of a limit to space. In such formations, and even as to those which we locate in the external, our creative fiat is ab-

solute as to their accomplishment and unlimited as to their extension. But when we seek to make these creations permanent to ourselves and palpable to others, we find our ability to do this is in striking contrast with the power by which we produce them. The paltry changes on a few feet of canvas, or a few roods of earth, or a few descriptive pages, is all that remains of the most magnificent ideal constructions of the most gifted. In this external sphere, the common domain of all, there can be no appreciable monopoly by any.

DISCOURSE II.

MAN IN THE SPHERE OF HIS OWN MORAL NATURE A SUPREME CREATIVE FIRST CAUSE.

In my former discourse I argued that man is a self active and self directed agent, with creative powers which he freely and successfully exerts to change the existing conditions and mould the future. Having, then, treated of the exercise of this creative power in the external, which is the common arena of all intelligent activity, I propose now to speak more especially of its manifestations in the internal, in which each individual has his own special sphere of creative effort, bounded only by his knowledge.

§ 14. I have already argued that some of our knowledge must be innate, and that some of what we acquire is obtained without our seeking, — without our effort.[1] External phenomena come into the mind unbidden, and cannot always be excluded. So, too, the facts and ideas which are already stored in the memory often come into

[1] See page 4.

view, and with them the perception of new relations, without any preliminary effort, and these cannot be discarded by any direct effort. This independence of the will gives to these intuitions the distinguishing characteristic of the phenomena of a *sense*, and, with the observed facts, indicates the existence of a *cognitive sense.*

As before stated, our acquisitions of knowledge are always by *simple immediate perception*, and hence in the final assimilation these are all the subjects of the cognitive sense; but some of our cognitions do, and others do not, require preliminary effort to bring them within the range of this immediate mental vision.

In this there is no difference, *per se*, as to our perceptions of external and internal objects. In the external we may have to remove obstacles to our seeing or hearing, and though our internal cognitions are the mind's more direct perception of what is already within itself, we still often need, by effort, to change the combination or arrangement of the ideas before the resulting relation or truth becomes manifest. In both cases the intuitive perceptions of the sense are distinguished from the results of the rational faculty by the effort required for the latter.

The phenomena of the external are brought

within range of our immediate mental perceptions by means of the external organs of sense. For the internal cognitive spontaneity, the main, if not the only, immediate instrumentalities seem to be the operations of memory and association, singly and in combination; but its genesis is often, perhaps always, by suggestion from the bodily organs, through the senses, or the appetites which much resemble and are closely allied to the senses. The sound of a cannon may call up our knowledge of the battle of Waterloo. The continual flow of ideas through the mind, singly or in trains or groups, is to it an exhaustless source of knowledge. If the mind ever became wholly inactive and oblivious, it could only be aroused and rescued from annihilation by some extrinsic agency. Our spontaneous cognitions of external objects and contemporaneous changes may be presented by the bodily organs of sense in any possible order or combination, and the internal phenomena may come into notice in a like manner, though in the latter the combinations and the order of succession seem to be more subordinated to the associations of experience.

The cognitive sense seems then to be, as it were, the common terminus of the arrangement, organism, or means by which both objective and subjec-

tive phenomena are immediately presented to the mind. These presentations become the subjects of our judgments, which may also be with or without preliminary effort: *e. g.*, we perceive at once the difference in the size of a pea and an orange, but do not thus perceive the equality of the sum of the angles of a triangle to two right angles.

To illustrate these processes, suppose the four letters *f*, *t*, *i*, *a*, are put before me to form into a word. It may so happen that I shall see them at first glance in the order *fiat*, and the thing is done, or I may have to proceed tentatively through few or many of the combinations which the letters admit of. So, too, the internal may accidentally come into view in such order that some new relation is immediately apparent, and seems like a sudden flash illuminating the mind from without, without any agency of its own. The circumstances and the perception may thus come under our observation without even an effort to direct attention to them.

We distinguish the various perceptions of the one cognitive sense, first as objective and subjective, and then classify the former as senses of seeing, hearing, etc.; and, in regard to the latter, we speak of the sense of beauty, of order, of justice, honor, shame, etc. When the subject of these

cognitions, and of the judgments upon them, spontaneous or otherwise, is that of moral right and wrong, they constitute the genetic elements of the *moral sense.* But the mere perception or judgment as to right and wrong has of itself no more effect upon the sensibilities, than has the cognition that twice five are ten. It is not till we regard it as practically applied in action that it produces any emotion. Such action in others, when it is right, elicits our approval or admiration, and, when wrong, our censure or indignation; and in ourselves the triumph of the right inspires us with the pleasurable and elevating emotion of victory, while the yielding to the temptation to wrong brings with it the painful feelings of debility, self-debasement, and dishonor. It is in these emotions of glory and of shame thus excited that we find the manifestation or development of conscience, which is properly the *moral sense*, to the sensations of which the cognition of right and wrong is only a prerequisite. Nor is it material to the quality of our action whether these cognitions are true or false, for the moral virtue of our action all lies in our conforming them to our *convictions* of duty; and hence, though false convictions may cause our actions to be unwise, they do not affect their morality.

In regard to our action in the objective, I have argued that an innate knowledge that the movement of the muscles is effected by effort is a necessity, but, in view of the foregoing premises, there seems to be no analogous necessity that we should have any such knowledge of absolute right and wrong, or even any faculty or sense by which we can, intuitively or otherwise, acquire such knowledge.

The design of conscience seems primarily not to punish transgression, but to warn us against doing what is injurious to our moral nature. The monition comes in the contemplation of the act, and prior to its consummation, as in case one thrusts his hand into the fire, he feels the pain before he is seriously injured; and as by frequent repetition the tissues become callous and less sensitive to pain, so, too, the more frequent and the more flagrant a man's iniquities, the less the pain which conscience inflicts upon him. This is the reverse of what it should be if punishment were the object. With this warning knowledge of the effect, we are left to our own self-control, our own freedom in action.

§ 15. Our efforts for change in the sphere within us, excepting, perhaps, those for moral construction, are always to increase our knowledge.

The knowledge sought may be of either sphere. Its immediate object often, perhaps oftenest, is to enable us to decide more wisely as to our action in reference to the actual current events of life; or it may be for the pleasure we derive from the mental activity in the process, and the success which is almost certain to reward our search for truth. We can hardly fail to learn something, if not what we sought. A higher object may be to permanently increase the intellectual power, or, yet higher, to improve our moral nature.

§ 16. For the acquisition of knowledge by effort, mind has two distinct modes, — observation and reflection. By the former, we note the phenomena which are cognized by the senses, and by the latter we trace out the relations among the ideas — the knowledge — we already have in store, and thus obtain new perceptions, new ideas. A large portion of our perceptions, however acquired, are primarily but imagery of the mind, — pictures, as it were, of what we have perceived or imagined. In this form we will, for convenience, designate them as *primitive perceptions* or *ideals*. By these terms I especially seek to distinguish these perceptions from those which we have associated with words or other signs or representatives of things and ideas.

There is a somewhat prevalent notion that we can think only in words; but it is obvious that we can cognize things for which we have no name, and can also perceive their relations before we have found any words to describe them; and in fact such knowledge or perception generally precedes our attempts to describe them.[1]

These primitive perceptions, or *ideals*, are thus independent of the words which we use to represent them, and to which they may have a separate and prior existence. Even when in a strictly logical verbal process we reach a result in words, it is not fully available till, by a reflex action, we get a mental perception of that which those words signify or stand in place of.

Much of our acquired knowledge is of the relations in and between our primitive perceptions.

In the pursuit of truth by reflective effort we also have two modes. In the first place, we may through our immediate primitive perceptions of things which are present, or the mental imagery of things remembered, directly note the existing relations among them or their parts without the use of words in the process; or, we may substitute words as signs or definitions of these primitive perceptions, and then investigate the relations among the words so substituted.

[1] See Note 7.

In the difference of these two modes we find the fundamental distinction between poetry and prose, the former being the ideal or poetic, and the latter the logical or prosaic, method. The poet uses words to present his thoughts, but his charm lies in so using them that the primitive perceptions — the imagery of his mind — shall be so transferred and pictured in that of the recipient as to absorb his attention to the exclusion of the verbal medium. We see the painting without thinking of the pigments and the shading by which it is impressed upon us. Every reader may experimentally test this distinction. If it is well founded, he will find that when any portion of a poem, instead of thus picturing the thought on his mind, requires him to get at it by means of the *relations of the terms* in which it is presented, there is a cessation or revulsion of all poetic emotion.

The material universe, which, upon either the ideal or materialistic hypothesis, is the thought and imagery of the mind of God directly impressed on our minds, is the perfect, and perhaps the only perfect type of the poetic mode.

Poetry, thus depending on this prominence of the primitive perceptions, is the nearest possible approach which language can make to the reality which it represents. Assuming that simple obser-

vation is common to both, these two modes of investigation — the one carried on by means of a direct examination of the realities themselves, or mental images of them, the other by means of words or other signs substituted for them — also present the fundamental and most important, if not the only, distinction in our methods of philosophic research and discovery.

Each has its peculiar advantages, and both are essential to our progress in knowledge. Like the external senses of sight and feeling, they mutually confirm or correct each other.

The prosaic has the advantage of condensing and generalizing, but is applicable only in a very contracted sphere, extending little, if any, beyond that in which a scientific language has been constructed; while the poetic, dealing directly with the things or their images, is coextensive with thought, perception, and imagination.

The prosaic can do little more than aid us to find and condense what is, and this only in the limited domain in which a language has already been constructed; while the poetic is prophetic and creative in a sphere as boundless as its fancy.

Syllogistic reasoning furnishes good examples of the prosaic mode, but the purest form of it is manifested in our dealings with algebraic equa-

tions. In these we use letters, as signs of quantities (known and unknown), and other signs to express their relations to each other, and then by an examination of these signs and their defined relations, without any reference to any actual quantities, we logically deduce general formulas applicable to all quantities.[1]

All general propositions must be *expressed* in the prosaic mode, and the progress of knowledge usually being from particulars to generals, little advancement can be made without it. The particulars become too numerous and cumbersome for the mind to deal with separately.

But the poetic mode dealing directly with the things as observed, recollected, or imagined, we are by it enabled to advance beyond the limits of language and of the senses. It has a telescopic reach by which it penetrates the future and perceives the earliest dawn of truth.

It is thus the most efficient truth-discovering power, and at the same time furnishes the means of communicating the discoveries it makes in advance of the logical processes.

The greater facility and rapidity of the poetic over the logical process is illustrated by the ease and quickness with which we *perceive* the equality

[1] See Note 8.

of two figures when one is applied directly to the other, as compared with our ascertaining this equality by means of a geometrical demonstration.

This greater reach and quickness makes the poetic power the essential attribute of genius in all its varieties. But this poetic power, this power of dealing directly with things, or our immediate perceptions of them, though prominent in the more gifted, is not restricted to them, but pervades the whole domain of our intellectual activity.

In its least ethereal and most common form, it is the basis of that common sense which, looking directly at things, events, and their relations, enables us spontaneously to form just opinions, or probable conjectures, of immediate consequences, and to determine as to the appropriate action. From this low estate, when aided by elevated moral sentiments, combined with intellectual power, and invigorated with warm feelings, pure passion, and fervid enthusiasm, it rises to the dignity of inspiration and the sublimity of prophecy.

The facility of application to the current affairs of life which pertains to the ideal processes makes the poetic attribute the main element of practical business ability. The current events of life are too complicated, variable, and heterogeneous

for the application of verbal logic. In the mistakes to which even careful and skillful logicians are liable from too hasty generalizations, faulty definitions, and fallacious inferences, we see the danger which would arise if the uninitiated, who are immersed in business, and whose decisions must often be hasty, should rely upon processes of reasoning in which an error in the signification, or in the application, of a term might vitiate their conclusions and lead to disastrous action.

To such the processes of ideality are much safer. In these, without the intervention of words, the mind, at a glance, takes in the actual conditions, and reaches its conclusions in incomparably less time than would be required to substitute the terms, test their precision, examine their relations, and arrange them in the requisite logical order.

The greater quickness with which we examine *particular* cases by the poetic process to some extent compensates for the greater number of instances, which may be embraced in one *generalization* of the prosaic.

Persons who adopt the quicker mode are often notably discreet, wise, and able in the actual conduct of affairs, but from the exclusion of words in the process, and its flash-like quickness, they can-

not state the grounds of their conclusions, nor assign a reason for their consequent action.

The poetic processes are also the characteristic feature of what has been termed a woman's reason, which is thus contradistinguished from verbal logic. And the practical application of these processes is illustrated in the quick and clear perception of the circumstances, and sound judgment upon them, with which woman is properly accredited. This feature also leads us intuitively to regard woman as of finer mould, and to expect from her æsthetically and morally more than from the sterner sex. And it is to her command of these more direct and more ethereal modes of thought and expression that we must attribute her superior influence in softening the asperities of our nature, and refining and elevating the sentiments of our race. Hence, too, it is that while the finest and strongest reasoning of philosophy has in this respect accomplished so little, woman has accomplished so much. The refined subtleties of an Aristotle, or the glowing sublimities of a Plato, though presented to us with all the fascinations of a high-toned morality, with all the accessories of graceful diction and persuasive eloquence, are dim and powerless to that effluence of soul which with a glance unlocks the portals to

our tenderness, which chides our error with a tear, or winning us to virtue with the omnipotence of a charm, irradiates the path of duty with the beaming eye, and cheers it with the approving smile of loveliness. As compared with such influences, the results of logic or any prosaic form of words are weak.

It is, then, through the poetic processes that we mainly get the perceptions, the knowledge, by which we direct our actions in the varying events and multifarious combinations of every-day life.

Though it is in a subdued form that the poetic power is thus practically available, it still seems a desecration to put such high endowments to such common uses; but we have tamed the lightning and made it run on our errands and drudge in our workshops.

§ 17. I have already touched upon the exercise of our creative power in the sphere without us, in which we act with all other conative beings. But it is in the isolated sphere within us, in the seclusion of our own spiritual nature, that we should expect to find this power most potent, and our efforts, always mental, most successful. And it is in a better knowledge of the character, the relations, and the modes of the poetic and the logical processes with a more general cultivation of

the former, and by a more systematic and intelligent selection from these two cardinal modes of investigation of that which is best suited to the subject in hand, or oftener by a judicious application of both to the same subject, so that each may supplement and supply the deficiencies, or correct the errors, of the other, that I look for increased efficiency, reach, and accuracy in the mind's intellectual ability.

The discovery of improved modes for such cultivation, selection, and single or combined application of these two cardinal methods of seeking truth, and the means of making these discoveries accessible and available to the popular mind, are both within the province of the metaphysician, and they open to him an elevated sphere of utility.

The benefits which may be anticipated from exploring this field are not merely those which metaphysical studies confer as a strengthening exercise to the mental powers. They also include the making of the same strength more effective by the invention or discovery of improved modes in their application.

It is true that both these modes of thought must always have been in practical use, but with little or no conscious attention as to the selection

or application of them, singly or combined. The neglect or unconsciousness of any such aids is manifested in the not uncommon belief that we always think in words—a belief which is shared even by men of deep philosophic thought.

§ 18. But it is in the sphere of our moral nature that I look for beneficial results far more important than even the increase of intellectual power, and in this more especially through the agency of the poetic element. It is in this realm that we would naturally look for the most congenial sphere of action for our most ethereal attribute. Conformably to these anticipations, I hope to show that, in the formation of character, this power of creating imaginary constructions, and of contemplating and perfecting them, exerts an influence of the highest importance, which, by cultivation, may be enhanced without conceivable limit. This is the mode in which our conceptions of mental or material phenomena most nearly supply the place of actual experience, and in some respects with decided advantages. The occasions for actual experience, too, are casual and uncertain, while the ideal processes are always available. From these supposable events, which are constantly flowing through the mind, we form rules of conduct, or receive impressions, which

govern us in the concerns of real life. It is in meditating on these that we nurture the innate feelings, sentiments, and passions, which not only give impulse to transitory action, but become the main elements of the fixed character. He who accustoms himself to this discipline, who, withdrawn from the bustle of the world, tranquilly contemplates imaginary cases, and determines how he ought to act under them, frames for himself a system of government with less liability to error than is possible in the tumultuous scenes of active life. He is not swayed by those interests and passions which so often distort or confuse our vision when we act from the impulses of immediate and pressing circumstances.

The ideal formations may not be accurately fitted to the occasions which actually arise, but the contingency can hardly occur in which some of the vast number of them that may be constructed, even by those most engrossed with the realities of life, will not in some degree be applicable. They will at least furnish suggestive analogies, and in the processes lead to habits of *disinterested* thought, which are so essential to the successful pursuit of truth, and especially of moral truths, which often conflict with the desires of the active moment.

We cannot directly will a change in our mental affections any more than in what are termed bodily sensations. We cannot *directly* will the emotions of hope or fear, or to be pure and noble, or even to want to become pure and noble, any more than we can directly will to be hungry, or to want to be hungry. If we want to take food we are already hungry, and if we want to perform pure and noble actions, and to avoid the impure and ignoble, while this want or disposition prevails we are already intrinsically pure and noble. If we want to be hungry, *i. e.*, want to want food, and know that by exercise, or by the use of certain stimulants, or by other means, we may become hungry, we may by effort induce this, in such case, a cultivated want; and if we want to want to be pure and noble and know the means, we may, in like manner, by effort gratify the exciting want, and induce the want, the cultivated want, to become pure and noble.

If, from seeing the pleasure which admiring a beautiful flower affords to others, or from any other cause, we want to admire it, we will readily perceive that some additional knowledge is essential to that end; and that the first step is to find, by examination, what in it is admirable. To examine then becomes a secondary want, and we

will to examine. The result of this examination may be that its before unknown beauties excite our admiration, and make it, or the gazing upon it, an object of want; so we may also will to examine what is pure and noble till its developed loveliness excites in us, or increases, the want to be pure and noble, and induces a correlative aversion to what is gross and base.

The occurrence and recurrence of our spiritual wants are as certain as those of hunger. We are continually reminded of them by our own thoughts and acts, by comparison with those of others, and by the external manifestations of God's thought and action; and he has placed within us the moral sense, as a sentinel, with its intuitions awakening the conscience, and warning us of what, in wants or means, is noxious to our moral nature with more certainty than the senses of taste and smell tell us of what is injurious to our physical well-being.[1]

It thus appears that want, constitutional, acquired, or cultivated, is the source of effort for internal as well as external change.

The desire to effect some change in the existing or anticipated conditions is the only conceivable motive for the action of any rational being.

[1] See page 50 and 51.

As a man cannot do any moral wrong in doing what he believes to be right, his knowledge, though finite, is infallible as to what it is morally right for him to do; and his fallibility in morals must consist in his liability to act at variance with his knowledge or conviction of right, and never in deficiency of knowledge, or even in belief. In this view his knowledge in the sphere of his moral nature is infallible, and were he infinitely wise or certain to act in conformity to his knowledge of the right, he would be infallible in his morals.

It is also evident that the mind must direct its efforts for internal change by means of its knowledge, including its preconceptions of the character it would therein build up.

Now such preconceptions are imaginary constructions, incipient creations, in the future.

In its constructions in the external, the mind does not of necessity even consider or recognize the already existing external circumstances. In "castle-building," it often voluntarily discards them, and forms a construction entirely from its own internal resources. Retaining its knowledge of the past, and having the power of abstraction, it could just as well conceive an external creation if all external existences, facts, and circumstances were annihilated. A man thus isolated might

imagine a material universe in which all is in his view beautiful and good. He may not make, nor even intend to make, the additional effort to actualize these combinations and make them palpable to others, or permanent within himself.

He has merely exercised himself in constructive effort. So, too, if moved by the aspirations of his spiritual being, he may conceive a moral character, pure and noble, resisting all temptation to evil, and conforming with energetic and persevering effort to all virtuous impulses and suggestions. Though he may make no effort, and not even intend to make any, to realize such ideal conceptions, they are not without their influence. The constructions thus sportively made add to our knowledge of the materials of character, and to our skill in combining them. Poetry and fiction in other forms present us with such constructions ready formed by others.

The making of such constructions as harmonize with our conceptions of moral excellence is in itself improving; a determination in advance by persevering effort to conform our conduct to them is a greater step, and the persistent effort to actualize them when the occasion for their practical application has arisen is, so far as the moral nature is concerned, really their final consummation; for

whether the proximate object of the effort is or is not attained makes no difference to its moral quality. The intent or motive is not affected by the success or failure of the effort. The external effect is but the tangible evidence to others of the internal effort which, with the intent, is the real manifestation of the moral element. If a man wills to do an act which is good and noble, it does not concern his virtue whether his effort be successful or otherwise, the effort is itself the triumph in him of the good and noble over the bad and base, and the persevering effort to be good and noble is itself being good and noble.

It follows from these positions that, as regards the moral nature, there can be no failure except the failure to will, or to make the proper effort. The human mind with its want, knowledge, and faculty of effort, having the power within and from itself to form its creative preconceptions, and to will their actual realization independently of any other cause or power, up to the *point of willing* is, in its own sphere, an independent creative first cause. Exterior to itself it may not have the power to execute what it wills, it may be frustrated by other external forces. Hence, in the *external* the ideal incipient creation may not be consummated by finite effort. But as in our *moral*

nature the willing, the persevering, effort is itself the consummation, there can in it be no such failure; and the mind in it is therefore not only a creative, but a SUPREME CREATIVE FIRST CAUSE.

We have, then, between effort in the sphere of the moral nature and in that sphere which is external to it this marked difference; while in the external there must be something beyond the effort, *i. e.*, there must be that subsequent change which is the object of the effort before the creation is consummated, in the sphere of the moral nature the effort for the time being is itself the consummation; and this, if by repetition, ideal or actual, made *habitual* becomes a permanent constituent of the character which, through habitual *action*, will be obvious to others; will be a *permanent palpable* creation.

In his internal sphere, then, man has to the fullest extent the powers in which he is so deficient in the external. In it he can make his incipient creations palpable and permanent constituents of his own moral character.

§ 19. In this permanent incorporation of them with his moral nature habit has a very important agency. This may be cultivated and its efficiency increased by intelligent attention, and through it

the ideals, the scenic representations which are continually being acted in the theatre within us, may be made available in advance of actual experience, for which, as already suggested, they serve as a substitute, and with some decided advantages in their favor.

In the *sphere of its own moral nature*, then, whatever the finite mind really wills is as immediately and as certainly executed as is the will of Omnipotence in its sphere of action, for the willing in such case is itself the final accomplishment, the terminal effect, of the creative effort.

We must here be careful to distinguish between that mere abstract judgment, or knowledge of what is *desirable* in our moral nature, and the want and the effort to attain it. A man may know that it is best for him to be pure and noble, and yet, in view of some expected or habitual gratification, not only not want to be *now* pure and noble, but be absolutely opposed to being made so, even if some external power could and would effect it for him. We may, however, remark that, as the moral quality of the action lies wholly in the will, and no other being can will for him, to be morally good without his own effort is an impossibility; all that any other being can do for him in this respect is to increase his knowl-

edge and excite his wants, and thus induce him to put forth his own efforts. Even Omnipotence can do no more than this, for to make a man virtuous without his own voluntary coöperation involves a contradiction. The increase of virtuous efforts indicates an improvement in the character of the cultivated wants and an increase of the knowledge by which right action is incited and directed. The influence of such knowledge and wants, becoming persistent and fixed by habit, forms, as it were, the substance of virtuous character.

In the sphere of the internal as well as in the external, the last we know of our agency in producing change is our effort. But in our moral nature the effort is itself the consummation. The effort of a man to be pure and noble is actually being pure and noble. The virtue in the time of that effort all lies in, or in and within, the effort and the intent, and not in its *success or failure.* It is for the time being just as perfect if no external or no permanent results follow the effort. If the good efforts are transitory, the moral goodness will be equally so, and may be as mere flashes of light upon the gloom of a settled moral depravity.

§ 20. Nor does the nature of the actual result-

ing effect make any difference to the moral quality of the effort. A man's intentions may be most virtuous, and yet the actual consequences of his efforts be most pernicious. On the other hand, a man may be as selfish in doing acts in themselves beneficent — may do good to others with as narrow calculations of personal benefit — as in doing those acts which he knows will be most injurious to his fellow-men; and doing such good for selfish ends manifests no virtue, whether that end be making money or reaching heaven, and brings with it neither the self-approval nor the elevating influences of generous self-forgetting or self-sacrificing action.

A man who is honest only because it is the more gainful would be dishonest if the gains thereby were sufficiently increased. Such honesty may indicate that he is intelligent and discreet, but virtue is not reached till he acts not from sordid and selfish calculations, but from a sense of right and duty. And virtue is not consummated and established in him till he feels the wrong doing as a wound, leaving a blemish on the beauty and a stain on the purity of the moral character, the preservation and improvement of which has become his high absorbing interest, and the construction and ideal contemplation of which he has

come to appreciate and to value above all other possessions and all possible acquisitions.

The consequences of a volition may prove that it was unwise, but cannot affect its moral status. If at the time of the effort one neither did nor omitted to do anything in violation of his own perceptions or sense of duty, he did no moral wrong, and any subsequent consequences cannot change the moral nature of the past action. No blame or wrong can be imputed to one who did the best he knew.

Again, no moral wrong can pertain to a man for any event in which he has had and could have no agency, which he could neither promote nor obstruct. Until he has put forth effort against his knowledge of duty, or omitted to put it forth in conformity with this knowledge, there can be no moral wrong. There is no present moral wrong, either in the knowledge now in his mind or in the exciting want which he now feels. There may have been moral wrong in the acquisition of any knowledge, or in the omission to acquire any, which required an effort. Such acquisition or omission may have then been counter to his conviction of right.

There can be no moral wrong in the acquisition of that knowledge which he unintentionally ac-

quires. That a man involuntarily knows that the sun shines, or that a drum is beating, cannot be morally wrong in itself. So, likewise, that any knowledge now actually has place in his mind, can, of itself, involve no present moral wrong doing, though the fact that it is there may be evidence of a previous moral wrong committed in its acquisition. This he cannot *now* prevent. Such knowledge may have so polluted his moral nature, that it will require an effort to purify it. The polluting arose from the previous effort to acquire, or, negatively from not making the effort to prevent acquiring, and not from the mere fact of possessing the knowledge, which is now beyond his control, and does not, of itself, alter the moral condition from that state in which the wrong of acquisition left it, though every wrong application of it may do so.

So, also, in regard to the natural *wants*. There is no moral wrong in the mere fact of their recurrence. There may be moral wrong in our willing to gratify a want which should not be gratified, or in entertaining or cultivating one which should be discarded or eradicated, or in the time or in the mode of the gratification. That such want exists at all, or that it should recur at such time, may be proof of a previous wrong effort in culti-

vating the want, or of an omission to control or eradicate it, or to cultivate some conflicting want; but if its present recurrence is not by our own effort, such recurrence, of itself, can involve no present moral wrong, and merely furnishes the occasion for virtuous effort to resist what is wrong, or to foster and strengthen what is right. The want may indicate the present condition of the moral nature, while it also supplies the opportunities which make both improvement and degeneracy possible. Though that condition may be comparatively low in the scale, yet an effort to advance from it may be as truly and purely virtuous as a like effort at any higher point.

In the *present moment*, then, the knowledge and the want, which exist prior to effort, involve no present moral right and wrong; and as we have already shown that the sequence of the effort does not, it follows that the *moral right and wrong are all concentrated in the effort, or act of will, which is our own free act.*

This and some preceding results are perhaps sufficiently attested by the consideration that the goodness or badness in which one has no agency, or of which he is not the cause, is not his goodness or badness, and he can have such agency or be such cause only by his act of will.

Efforts to be pure and noble, and for corresponding external action, may become habitual, and hence comparatively easy. Through habit, memory performs the same office for our acquirements in *acting* that it does for our acquisitions of knowledge, *retaining or holding fast what is acquired*, and thus leaving the mind at liberty to employ itself in new acquisitions, new progress in knowledge, including modes of action.

We may further observe, in this connection, that our moral wants are more under the control of the mind's acts of will than the physical conditions of bodily wants; and though we cannot directly will not to think of a thing, yet, by willing to think of something else, we may displace and banish other thought; so, too, though we cannot directly will the removal of a want, yet we can put it away by directing our attention to something else, or by inducing another want in its place. And though this is especially true of the moral wants, it partially applies also to the physical. We know, for instance, that by exercise and fasting we can induce hunger; and we may find means of inducing any moral want, and by the use of these means, some of which I have already suggested, may give one moral want a preponderance over another, which, by repetition becoming

habitual, will go far to eradicate it and to modify the influence even of a physical want.

If entirely eradicated, there can be no corresponding volition, and a man habitually holy, who has eradicated the conflicting wants, has annihilated the conditions requisite to his willing what is unholy; and as he cannot be unholy except by his own voluntary act, he has then no power to be unholy. This is, perhaps, a condition to which a finite moral being may forever approximate but never actually reach, never attain that condition in which it is absolutely unable to will what is impure and ignoble.

But by these creative efforts fresh elements of moral character have been produced, which by the assimilating and solidifying forces of *habit* may become permanent accretions to the moral nature, a second nature, not less secure against the ordinary vicissitudes and temptations of life than the innate or earlier acquired principles or modes of action.

Through the knowledge of the means of giving to some of our internal wants a predominance over others, we are enabled by effort to influence our moral characteristics at their very source. Even under circumstances least favorable to the recognition of our spiritual condition, amid the

engrossments of sense, the excitements of passion, or the turmoil of absorbing business, external events will often suggest our moral wants, while in calm and thoughtful moments they present themselves as spontaneously as thirst in a summer's day.

§ 21. Having now shown that we can cultivate our wants, and give one or the other of conflicting wants the ascendency, and promote one to the at least partial exclusion of others; that the knowledge of each individual as to what is morally right for him is infallible; that the mind can form an ideal construction or preconception within itself without reference to any external existence; that it can freely make efforts to realize such construction; and that nothing *beyond the effort* has any influence upon the moral quality of the effort, or of the agent making it, we may more confidently than before deduce the conclusion, that the mind in the sphere of its own moral nature, applying an infallible knowledge which it possesses to material purely its own, may conceive an ideal moral creation, and then realize this ideal in an actual creation by and in its own act of will; and hence, when willing in the sphere of his own moral nature, man is not only a creative first cause, but a *supreme* creative first cause; and,

as his moral nature can be affected only by his own act of will, and no other power can will, or produce his own act of will, he is also, in the sphere of his moral nature, a *sole* creative first cause, though still a finite cause. Other intelligences may aid him by imparting knowledge; may by word or action instruct him in the architecture; but the application of this knowledge, the actual building, must be by himself alone. Though finite, his efficiency as cause, in this sphere, is limited only by that limit of all creative power, the incompatible, or contradictory; and by his conceptions of change in his moral nature, which are dependent upon the *extent* of his knowledge; and, in this view, the will itself having no bounds of its own, may be regarded as infinite, though the range for its action is finite; or, in other words, within the sphere of its moral nature, the finite mind can will any *possible* change of which it can conceive, or of which it can form a preconception; and as the willing it is the consummation of this preconception, there is no change in our moral being, which we can conceive of, that we have not the ability to consummate by effort; and as, so far as we know, our power to conceive of new progress — to form new conceptions of change — enlarges with every consummation of

a previous conception, there is no reason to suppose that there is any *absolute* limit to our moral sphere of effort; but that it is only relatively and temporarily circumscribed by our finite perceptions, which, having a finite rate of increase, may forever continue to expand in it without pressing on its outermost bound; and, if all these positions are true, every intelligent moral being capable of conceiving of higher ethical conditions than he has yet attained, has in his own moral nature, for the exercise of his creative powers, an infinite sphere, within which, with knowledge there infallible, he is the supreme disposer; and in which, without his free will, nothing is made, but all the creations in it are as singly and solely his as if no other power or cause existed; and for which he is, of course, as singly and solely responsible as God is for the creations in that sphere in which he manifests his creative power, though, as a finite created being, man, even in this his own allotted realm, may still be properly accountable for the use of his creative powers to him who gave them.

§ 22. The gratification of some of our physical wants being essential to our present existence, they are most imperative and have precedence, but they are in their nature limited and temporary, and, when gratified, cease to demand our

effort. In this their function seems to be to train the mind to habits of persevering effort, and thus fit it for the exercise of its powers in the gratification of the nobler wants of its moral being.

In contrast with our physical, our spiritual wants are boundless and insatiable. In our want for progress — for something better than we have yet attained — our activity finds an illimitable sphere, and in our *want* for activity, exhaustless sources of gratification.

§ 23. The examination of past experience and of supposed cases may in some sort be performed in the prosaic mode of verbal representation or logical reasoning; but, from the time required, it is impossible that this method should be generally resorted to, and when it is, though it may establish general principles, it is less moving and has a less direct influence on the conduct than those *scenic representations* which are so faithfully acted upon the secluded theatre within us. *Ideality is in this respect the nearest approach to reality.*

§ 24. There is peculiar consolation and encouragement in the fact that mind possesses in these ideal processes an inherent power of modifying material and other extrinsic influences; that it has an incentive which is as potent in our spiritual nature as sensation is in our physical.

Fortunately, too, the occasions of life which have a tendency to warp the disposition, though frequent, are transient, have their intervals, and in some degree neutralize each other. The ideal conceptions may always be brought to mind, and if we habitually encourage the presence of those only which are pure and elevated, we shall as a consequence become more and more refined and ennobled.

Without this countervailing element our moral nature would seem to be largely the sport of chance, liable to be driven from its proper course by every current of feeling and every storm of passion. Character would then chiefly depend on accidental extrinsic circumstances.

These ideal processes early give a pleasurable exercise to the mind, and, like other sports of youth, are a preparation for sterner work, when from the inflexible material of permanent principles we would construct an enduring moral character. We enact these scenic representations as an alluring gratification, and naturally find pleasure in perfecting our ideal creations.

Our first creative efforts are probably in the material. The child early forms ideal constructions, and seeks with clay or blocks to give them a tangible objective existence. It thus makes its

first essays in creative effort. Its efforts, however, are early transferred to the spiritual, and ideas of moral beauty and grandeur, and of glory, honor, and renown, as the results of lofty character and noble action, find place in the young imagination, and furnish the materials and the incentive to such ideal constructions. These may be evanescent, but in vanishing they will still leave visions of grace, beauty, and purity.

We are thus at an early period of life introduced into the domain of constructive moral effort, and the quickening influence which the soul receives in this direction, when the first revelations of unselfish and romantic passion fill it with ideals of loveliness, grace, and elevation, and inspire it with pure and lofty sentiment and energetic virtue, attests the beneficent provision for our early moral culture.

But these benign endowments, so potent for good, are liable to be perverted to evil. We have alluded to our physical wants as the more imperative, but as temporary, leaving us much intervening time to attend to the spiritual. The influence of these temporal wants is, however, made less inconstant by the secondary want of acquisition; the want to provide in advance the means of gratifying the primary wants when they recur. To

this acquisitiveness, even when gratification of the physical wants is its sole object, there seems to be no limit, and this may permanently become the habitual object of effort to the exclusion of the spiritual.

To restrain the influence of the processes of ideality within such narrow limits is unnatural. By doing so the individual voluntarily foregoes the pleasures which arise from the generous emotions, cuts off their connection with the springs of action, and substitutes narrow prudential calculations, low cunning, and artifice, which cramp and degrade the moral nature, and exclude its finer feeling and nobler aspirations.

The power which through ideality we exert over our moral nature, though less nobly exhibited, is as strongly attested in its degrading as in its elevating influences; in the aggravation of selfishness, for instance, no less than in the development of the generous virtues. In the latter case, it seems to advance freely, allured by the delights which attend its progress. In the former it is forced back against the current of its affections and the repulsion of conscious self-debasement.

It seems strange that a labor thus painful in its performance and baneful in its results should ever be accomplished. It is probably in most

cases hastily done, in view of some immediate gratification, without considering its permanent pernicious influence, and finally effected and confirmed by magnifying the advantages of selfishness, or the sacrifices of immediate personal interests, which a yielding to generous impulses may have occasioned. The avaricious miser looks upon a liberal man as one too weak to subdue the liberal impulses or resist the pleasure of yielding to them. He knows the pain and labor which his own prudence has cost him, and congratulates himself on his exemption from such benevolent frailties.

§ 25. The elevating influences of ideality are needed to counteract the tendencies of a social system based largely on selfishness, and to neutralize the utilitarian, materialistic, comfort-seeking proclivities of this mechanical and commercial age.

But ideal constructions have been discouraged and repressed as a waste of time, stigmatized as mere spray, or vapors, idle imaginings leading to groundless hopes and illusive views of life. Relieving these processes from obstruction and perversion, and leaving them to their natural course in forming the moral character, would be a very important gain on present conditions.

And this might be affirmatively supplemented by systematic education in this mode of moral culture, making the ideal constructions a subject of study, as an artist now studies his models and pencil sketches with a view to their reproduction in more perfect and permanent forms.

There is at once confirmation of our theory and encouragement as to its practical application in the fact that woman, to whose guiding care the infant intelligence is naturally confided, is by her special endowment of poetic modes of thought and expression so fully equipped for this important work.

I deem it but a reasonable anticipation that whenever this means of moral culture shall begin to be appreciated, and even moderately developed, the effects upon the advancement, upon the elevation and happiness, of mankind will be such as not only to relieve metaphysics from the reproach of being unfruitful, but to show that as it embraces the largest and grandest realm of human thought, it is productive of the most important and elevated utility, a utility far transcending all that has been realized in the domain of the material.

When philosophy shall have fairly entered upon this higher sphere of mental effort for men-

tal progress, it may again disdain its application to any less elevated or less elevating pursuit. But still, when from their celestial heights its votaries look down upon the enduring and beneficent achievement of their predecessors, upon the solid foundation in physical science upon which they are themselves building their more ethereal superstructure, we may trust that they will at least concede to them the merit of having faithfully, intelligently, and vigorously performed their part in the more humble sphere of physical research, and will accord something even of grandeur and of glory to an age which from the chaotic sense perceptions evolved a material universe of order and beauty, and, taming the wild forces of nature, made them subservient to the enjoyment and progress of man; enabling him without excessive labor to make that ample provision for his physical comforts which was, perhaps, a prerequisite condition to effort for a higher spiritual culture.

§ 26. In metaphysics the progress from abstract speculation to practical utility has not differed from that of the other sciences. All appear to have been at first pursued from a natural love of truth, an inherent curiosity stimulated by opposing mysteries without reference to ulterior benefit. Is this pursuit but the manifestation in us of an

instinct nobler in its nature and ministering to higher purposes than those which are essential to our physical existence? Or may not it and the love of approbation and the desire for fame be properly regarded as blind appetites of an elevated character?

The Greek geometricians when patiently investigating the conic sections had no thought of the use which a Newton would make of their discoveries, and when Huyghens discovered the polarity of light he had no idea that the sugar refiner would eventually use it to test the value, for his purpose, of a cargo of molasses.

So, too, metaphysics has been wrought upon for ages for no other reason than that it furnished a pleasurable and invigorating exercise to the intellect, a utility no higher or more direct than might be derived from whist or chess.

§ 27. It will be observed, too, that the solutions of the three problems which, with a very dim vision of their consequences, I have investigated, and to which I have in this paper invited attention, were, if not essential prerequisites, very important aids in reaching the particular practical utility I have herein suggested.

The first of these was the analysis of the fundamental distinction between poetry and prose, and

the finding that this distinction is the same as that between the two cardinal modes by which we seek for truth.

The second was our investigation as to man's freedom in willing and the fixing his status as an independent creative power in the universe; the exercise of these powers in the external being very limited and liable to be frustrated by other independent powers, while in the sphere of his own internal being he is supreme, and can there at will consummate his ideal constructions and make them palpable and persistent while he so wills.

The third was the inquiry as to the difference between instinctive and rational actions, and in this incidentally determining the nature and functions of *habit* by which these subjective constructions may be made permanent formations of the moral character and incorporated into our being as a *second nature.*

The first was essential to the discovery and comprehension of the creative powers which inhere in the poetic element, and to the appreciation of its capabilities in its especially appropriate realm of the spiritual, and its important agency in there forming and elevating the moral character.

The second presents the proof of man's free agency, without which, if he could be said to have a moral nature, he could have no agency in its formation or improvement, and no responsibility for its character. If he could be said to have any virtue, he could have no means or opportunity to manifest it in action. There could be no exhibition of it in beneficent action touching himself or others, and he could not use his creative powers for self-improvement or for any other purpose.

And third, without the agency of habit, our acquisitions in moral action would all be evanescent, and there could no more be progress in moral character than there could be in knowledge without memory. But by this conservative function of habit all of these acquisitions which we *sanction* by repetition in action, or by harboring in thought, are incorporated into and become permanent accretions to our moral character, and veritable exponents of it. That our own action is thus required in the formation of habits brings them in their incipiency within our own control; but from the greater ease with which we perform actions for which we have the plan ready formed, it requires energy and vigilance to prevent falling into habits which our judgment does not approve. To eradicate them at a later period requires much more labor and increased vigilance.

§ 28. We have now endeavored to show that the only efficient cause of which we have any real knowledge is mind in action, and that there cannot be any unintelligent cause whatever.

That every being endowed with knowledge, feeling, and volition is, in virtue of these attributes, a self active independent power, and in a sphere which is commensurate with its knowledge a creative first cause therein, freely exerting its powers to modify the future and make it different from what it otherwise would be; and that the future is always the composite result of the action of all such intelligent creative beings.

That in this process of creating the future every such conative being, from the highest to the lowest, acts with equal and perfect freedom, though each one, by its power to change the conditions to be acted upon, or rather, by such change of the conditions, or otherwise, to change the *knowledge* of all others, may influence the free action of any or all of them, and thus cause such free action of others to be different from what but for his own action it would have been.

That every such being has *innately* the ability to will, *i. e.*, make effort, which is self-acting; and also the knowledge that by effort it can put in action the powers by which it produces changes within or without itself.

That the only conceivable inducement or *motive* of such being to effort is a desire — a want — to modify the future for the gratification of which it directs its effort, by means of its knowledge.

That when such being so directs its effort by means of its *innate* knowlege, it is what is called an *instinctive* effort, but is still a self-directed, and consequently a *free*, effort.

That when the mode or plan of action is devised by itself, by its own preliminary effort, it is a *rational* action.

That when, instead of devising a plan for the occasion, we through memory adopt one which we have previously formed, we have the distinguishing characteristic of *habitual* action.

In the instinctive and habitual we act promptly from a plan ready formed in the mind, requiring no premeditation as to the mode or plan of action.

But in all cases our effort is incited by our want, and directed by means of our knowledge, to the desired end, which, whatever the particular exciting want, is always to in some way affect the future. In our efforts to do this in the sphere external to us, which is the common arena of all intelligent activity, we are liable to be more or

less counteracted or frustrated by the efforts of others. In it man is a co-worker with God and with all other conative beings, and in it can influence the actual flow of events only in a degree somewhat proportioned to his limited power and knowledge.

But that in the sphere of man's own moral nature the effort is itself the consummation of his creative conceptions, and hence in this sphere man is a *supreme* creative first cause, limited in the effects he may then produce only by that *limit* of his knowledge by which his creative preconceptions are circumscribed.

And further, that as a man directs his act by means of his knowledge, and can morally err only by *knowingly willing* what is wrong, his *knowledge* as to this is infallible, and as his *willing* is his own free act, an act which no other being or power can do for him, he is in the sphere of his moral nature a sole creative cause solely responsible for his action in it.

His only possible moral wrong is in his freely willing counter to his knowledge of right. He must have known the wrong at the time he willed or it would not be a moral wrong. Hence the knowledge by which he directs his acts of will is here as infallible as that of omniscience, and his

power to will within the limits of his knowledge being unlimited, he cannot excuse himself on the ground of his own fallible nature, but is fully and solely responsible for all the wrong he intended, or which he foresaw and might by right action have prevented. Conversely, a rightful action indicates no virtue beyond the knowledge and intent of the actor. The failure to make an effort demanded by the convictions of right is in itself a wrong. That in the domain of his own moral nature man is thus supreme indicates it as his especial sphere of activity. Ages of successful effort in the material has been the preparation for its successful occupation, and we may reasonably expect that the advance into the more ethereal realm of the spiritual will be marked by the sublimest efforts of pure and lofty thought, and that the results in it will be the crowning glory of all utility.

§ 29. In favor of these conclusions and against the doctrines of necessity and of sole material causation, I would here suggest an additional argument from final causes.

I cannot demonstrate, but I have a confiding faith that all progress in truth will increase the happiness and conduce to the elevation of man, and also in the converse of this, that whatever

tends to diminish our happiness and degrade our position will be found to be erroneous.

It is clear that, by adopting the materialistic views, we should be deprived of all the dignity of conscious power, and with it of all the cheering and elevating influences of the performance of duty, for that which has no power can have no duties. Instead of a companionship with a superior intelligence, communicating his thoughts to us in the grandeur and beauty of the material universe, — the poetic imagery, the poetic language, of which it is the pure and perfect type, — and in his yet higher and more immediate manifestations in the soul, we should be doomed to an inglorious fellowship with insensate matter, and subjected to its blind forces. That sublime power, that grandeur of effort, by which the gifted logician, with resistless demonstration, permeates and subdues realms which it tasks the imagination to traverse, and that yet more God-like power by which the poet commands light to be, and light breaks through chaos upon his beautiful creations, would no more awaken our admiration or incite us to lofty effort. We should be degraded from the high and responsible position of independent powers in the universe, co-workers with God in creating the future, to a condition of mere ma-

chines and instruments operated by "stimuli" and "molecules;" and though still with knowledge and sensibility to know and feel our degraded position, — "so abject, yet alive" — with no power to apply our knowledge in effort to extricate and to elevate ourselves. We might still have the knowledge of good and evil; but having no power to foster the one, or to resist the other, this knowledge, with all its inestimable consequences, all the aspirations which it awakens, and all the incentives to noble deeds which it in combination with effort alone makes possible, would be lost. And this dreary debasement would be unrelieved by that last hope which now mitigates our worst despair, — the hope that death will bring relief. For all mutation now being but changes in the indestructible atoms of matter, by means of its motion which is also indestructible and eternal, there would be little left to die, as there would again be little left for which to live. For all this I see no compensation in the materialistic doctrines now so predominant.

§ 30. We have observed that all our efforts are incited by our wants, that in our physical nature there is an innate constitutional provision by which they recur without any agency of our own, and there seems to be good reason to believe that

through a moral sense, or other constitutional provision, the wants of our spiritual nature also recur without our bidding. And we can hardly fail to see a portion of this provision in our constantly recurring aspirations for something higher and better than we have yet attained; and in all our æsthetic tastes, the delicate sensibilities of which are continually touched by the significant and suggestive beauty, harmony, and grandeur of God's visible creations, with their ever varying expression appealing directly to the soul in that poetic language of imagery and analogy which is comprehended by all, and exerts on all a persuasive and elevating influence. We are thus continually reminded of the wants and the capacities of our spiritual being, for no one capable of reflection can look upon the exquisite models, the vast, the grand, the beautiful, the perfect, thus presented to us, and not see that to all this there is a counterpart; that there is something which perceives and appreciates, as well as something which is perceived and appreciated; that within his own being there is an inchoate universe, to him as boundless, and which is his especial sphere of creative action. Here is opened to his efforts an infinity of space in which, as already shown, he is a supreme creative power, a sphere already canopied

with twinkling thoughts, dimly revealing the chaotic elements requiring his efforts to reduce to order and cultivate into beauty, and making visible a darkness which continually demands from him the fiat, "*Let there be light.*" Constructing this universe within is the great object of existence, the principal if not the sole end of life.

Happy he who, faithfully working in the seclusion of this his own allotted space, so constructs this internal universe, that when from the genetic void it breaks upon the gaze of superior intelligences, all the sons of God will shout for joy, and the great Architect shall himself pronounce it GOOD.

NOTES.

Note. I.

The phrase "First Cause" is used not in relation to time, but to indicate an *independent, originating cause.*

Note II.

I have elsewhere defined cause to be "that which produces change." Cause always implies the *exercise of power*, with which it is often very nearly identical. When this exercise of power is wholly insufficient and produces no effect, it will perhaps be most convenient not to regard it as cause, and it is excluded by the definition, "that which produces change."

But when one power in action is directly counteracted by another, so that neither produces any change, but only prevents the change which the other alone would produce, each of the powers is still *effective*, and perhaps should be regarded as cause, — the cause of things *remaining unchanged*, — and a better definition of cause may be, *that which makes the future different from what it otherwise would be.*

Note III.

I have argued, from the admitted qualities and properties of mind and matter, that mind — intelligence — in action is the only real cause, and especially that this alone can begin change. That in virtue of its distinguishing characteristics of feeling, knowledge, and volition, it is within itself a self-acting cause, capable of acting without being first acted upon, and being thus endowed at its birth, its earliest

actions — the instinctive — are, like all its subsequent ones, voluntary efforts suggested by its feelings and directed by its knowledge to the change desired. That the knowledge essential to such direction of the effort is innate, or exists from the moment of birth, is a legitimate inference, because the most simple that the observed facts admit of, and at the same time most in harmony with all our subsequent observation and experience. These genetic instinctive actions are thus found to be subject to the same conditions as our subsequent rational actions, all being *voluntary* actions, suggested by feeling and directed by knowledge to the end wanted.

The advocates of materialistic causation in the outset, as might have been anticipated, encounter serious difficulty as to the genesis of action or change. For the inauguration of change, a self-active power, or cause, is essential. We do not differ materially as to the problem presented for solution. Bain, one of the most able and thorough expounders of the materialistic doctrine says, "*the link between action and feeling* for the end of promoting the pleasure of exercise is the precise link that *must exist* from the *commencement;* the pleasure results from the *movement*, and responds by sustaining and increasing it. The *delight thus feeds itself.*"[1] Passing over some of the many assumptions of this statement, I would inquire how began, or whence came, this "*commencement*" of this "*movement*," from which *results* the *pleasure of exercise* which *responds by sustaining and increasing it, and thus feeds itself?* In the same paragraph, in connection with such muscular *exercise*, he speaks of "spontaneous movements being commenced," and after it says, "We must suppose the rise of an *accidental* movement," and again of "the *random tentatives* arising through spontaneity." From all this the legitimate inference seems to be that he regards these movements as commencing without any cause or reason whatever. The materialistic theory could reach no further than this, and here stops far short of

[1] *The Emotions and the Will.* Will, chap. ii. p. 315.

the generalization by which I have identified these genetic instinctive movements with our subsequent voluntary, rational actions, with no generic difference in the actions themselves, which are only distinguished by the different manner in which we become possessed of the knowledge by means of which we direct our efforts to produce such movements.

The advocates of material causation rely much upon physiology to support their views, and think they find empirical confirmation of them in the phenomena of the nervous system — its material structure of brain, spinal column, ganglions and nerve centres, with its connecting and permeating nerve fibres, with nerve currents, similar to the electric, flowing through them. This is a very interesting and a very useful branch of physiological research, but I fail to see its bearing upon the question as to what is the efficient cause, and what its nature and properties.

Suppose a man is looking at the machinery in a mill, the propelling power of which is, as is common, in a separate room. The observer, in tracing the source of motion, finds first the main shaft or axis coming through the division wall which limits his sight, and upon it a very large main or driving wheel, or pulley. This main shaft, extending through a large portion of the room, and having upon it other lesser pulleys, from which other motion is communicated by belts to other shafts on either side, and from these, and in some cases directly from the main shaft, the motion is communicated by smaller belts to the various machines, and in some of these by small cords to each portion of them. In this arrangement, with its large driving wheel at the head of the main shaft with other pulleys on the same, with the belts leading from them and putting other shafts on each side in motion, and the smaller belts and cords giving motion to each separate machine, and finally, in some, to each minute individual part — each particular spindle — we have an apparatus very analogous to that of the brain, spinal axis, ganglia, or nervous centres, and

connecting and permeating fibres of the nervous system; but no one, by any examination of the phenomena, would, in this application and distribution of the power to the machinery, learn anything as to the *nature* or kind of power in the adjoining room. He could only learn what it could *do*. He could not even tell whether it was a steam-engine, or a water-wheel. In view of the results of physical science its votaries would not hesitate to assert that, be it what it may, the *solar heat* is one of the intermediate agencies of its efficacy, and, if my views are correct, it is at least equally certain that in regard to both the mill and the nervous system the genesis of the power is *intelligence in action*.

Many of Bain's statements as to the spinal axis, the ganglia, the nerves with their nerve currents and counter currents passing to and fro in the transmission and distribution of power, would require very little change in the phraseology to make them pertinent to the shafts, pulleys, and belts which constitute the motor apparatus of the mill.

He says, "When the mind is in exercise of its functions, the physical accompaniment is the passing and repassing of innumerable streams of nervous influence," and as an inference from this, says, "*It seems as if we might say, no currents, no mind.*" [1]

So, too, when the steam-engine, or other motive power, of the mill is performing its functions, there is a constant passing and repassing of the belts through which its power or influence is distributed and communicated to the machinery; but the logical inference in both cases seems to be, not that in the absence of these movements there would be no power or cause, but simply that when there is no *action of the power or cause there is no effect*. If the apparatus ceased to move, we could not thence conclude that the *unseen power* had ceased to exist. It might be merely detached, and with undiminished vigor still be performing its functions, and even with its activity increased, by being rid of the attachments which had encumbered and retarded it.

[1] *The Senses and the Intellect*, 2d edition, § 25, p. 66.

The conclusion of Bain assumes that the "passing and repassing" — the movement — is itself the genetic cause to which there is no antecedent cause. He thus consistently puts it in the same category with those "accidental movements" and "random tentatives" of which he has before spoken.

NOTE IV.

If we call the *knowledge* by which we direct our instinctive actions *innate*, and all that we subsequently acquire without effort *intuitive*, the only application of the term instinctive will be to actions; or to ideas, or knowledge *born* in us, after our own birth, without our agency. Of this there are some indications in our subsequent experience.

NOTE V.

In my father's house we had a large black Newfoundland dog, named Gelert, with which my youngest sister and two other little girls had much amusement. They had a little carriage in which they harnessed him, he seeming to take a lively interest in all their sports, and a full share of the enjoyment. He was a favorite of all our large household. At one time, by his absence at night, he subjected himself to suspicion, and it was resolved to restrain his nocturnal wanderings, but for several successive evenings thereafter he succeeded, by watching his opportunity, in slipping out as some one entered the back door. Increased vigilance at last prevented this, and after all the household were in, Gelert found a bone, he had himself probably left in an outer room, which he took into the kitchen and there began to gnaw it. The cook did not usually permit this, but on this occasion refrained from driving him out, and he, against all law and precedent, with the bone in his mouth, made his way into the parlor, and there went round holding it up to each person in turn. Gelert had evidently devised a plan similar to that which Walter Scott, in his "Quentin Durward," ascribes to the Bohemian Hayraddin, who by persistent indecorous conduct contrived to get himself turned out of the convent of Namur.

My sisters had a vigorous and very intelligent horse that they drove for many years. He was much petted and allowed, in their rambles, to largely exercise his own discretion. If he saw one of his favorite thistles by the road-side he would turn aside to crop it. He was usually very discreet, but after he got into his dotage and was retired from service on his rations, he became somewhat *coltish* and mischievous. In good weather he was generally at large, and on several occasions tried to entice the factory team to run away, by going near them as they stood in harness and turning and running in a frolicsome way in front of them. In this he was not wholly unsuccessful.

He would untie his halter. I do not think he comprehended the intricacies of the knot, but that he dealt with it as a man does with a tangled skein, the convolutions of which he cannot trace; *i. e.*, he shook it, and pulled at it in divers ways, till he found a part that would yield and draw out. Tom would thus often get out of the stable, and when some one attempted to catch him, he would playfully let him get near and then spring away and repeat the operation. On one occasion he was near being caught, in consequence of treading on his loose halter, but he presently seized the farther end of it in his teeth, threw up his head with a triumphant air, and trotted off.

I had a horse (Charlie) of the Morgan breed, which is noted for intelligence. I very frequently drove him to one of my mills, about twelve miles from my home, generally going over a long and very steep hill, but sometimes going around it. On one occasion, I had, as was my custom, got out of the carriage at the foot of the hill to walk up it, but lingered behind to pluck some wild grapes. Charlie had got some distance ahead, when he came to the fork where the road around the hill diverged. I saw he hesitated a moment, and then with a very decided step took the road around. I called out Charlie, and he immediately turned and went through the intervening bushes to the direct road, though in doing so, he had now to go up a very steep ascent,

with no path, and up which he had never before been. He not only rationally interpreted my calling to him, but correctly estimated the relative positions of the two roads, and the mode of getting from one to the other, in which he had no experience, and neither this nor the significance of my calling are in the province of instinct.

On another occasion, in driving Charlie, I took an apple from my pocket, bit it, and not finding it to my taste, cast it aside. Just then Charlie came to a hill, slackened his pace and stopped, as he often did, to see if I would get out and walk up it. The ascent was so gradual that I deemed his suggestion unreasonable, and said "Go on, Charlie," when he turned his face toward me, and made such an unmistakable movement of his lips, that I got out and went back a few steps to get the apple for him.

My youngest brother, Joseph, had a short-haired Newfoundland dog, named Argus, which he trained with care, and it became an excellent retriever. I sometimes got him to take the bridle in his mouth and lead a saddle-horse from the mill to my father's house, nearly a mile distant.

In the course of his training, my brother, walking by a brook, directed the dog to bring a speckled turtle that he saw in the grass. This was so repulsive that my brother was obliged to place it in the dog's mouth, but he soon dropped it, and this process was repeated with similar result, until Argus swam across the stream and dropped the turtle on the other side, out of my brother's reach.

On one occasion my brother dropped his knife in a large pasture, and after walking on about a quarter of a mile, sent Argus back to find it. He soon returned, but brought nothing, and was again sent back with the same result. In a third effort he was gone a long time; but at last returning in high glee, my brother felt sure he had been successful, and was much surprised when the dog laid a mass of earth at his feet, in which was a cigar stump my brother had cast aside on the way. The dog had enveloped the cigar stump with earth, and so protected brought it in his mouth.

In these cases, and especially in the cases of Gelert with his bone, and of Argus with the tobacco, there was a marked devising of a plan of action adapted to new conditions, to meet new exigencies, and this, if my analysis is correct, is the especial characteristic of rational, as distinguished from instinctive, action.

I have spoken of the impossibility of our learning to move our muscles by effort; and actions which we readily perform instinctively might bother or puzzle us to do by the logical or ideal processes.

A fast trotting horse, if he attempted to move his four feet by premeditation of the successive movements of them, would probably move very slowly and only walk, or be confused and stumble. The difficulty would increase with the number of feet.

> "The centipede was happy quite,
> Until a toad, in fun,
> Said, pray which leg must follow which?
> That work'd her mind to such a pitch,
> She lay distracted in a ditch,
> Consid'ring how to run."

Most men, I think, if they attempted to make some of the muscular movements, *e. g.*, of the eye, by rational investigation of the mode, would find themselves in a similar predicament.

The same thing occurs in regard to our *habitual* actions, and especially as to those for which we have acquired the mode by mere memory, without the aid of the reasoning faculties. We can, *e. g.*, often write a word off hand correctly, when, if we deliberate, we are bothered, and some other way of spelling it seems just as reasonable and as likely to be right.

NOTE VI.

There are cases in which, knowing the circumstances, we may be morally certain what a man's volition will be. A starving man will eat if he can. A man will *try* to escape

from a burning house in which he is about to be enveloped in the flames. It is said that horses will not do this, but, when in danger of being burned, persistently resist being taken from their stalls, and will even run back to them after having been gotten out of danger.

An incident of my childhood may illustrate this action of the horse, which cannot be classed with the instinctive.

Before I was five years old I had crossed the street from my father's house with a cousin, a little girl of my own age, and seeing a horse and carriage coming very rapidly towards us, I impulsively ran back towards our house, and called to my cousin to do so. The result was that I got over safely, but my cousin was knocked down by the horse, and that she escaped instant death and without even serious injury, was deemed miraculous. The incident made a deep impression upon me, and I have always remembered, that I thus acted because I thought we would be safe only on the side of the street on which we lived. On former similar occasions, I had found that I was there in no danger, but had no experience as to the other side. The horse, probably by association, feels safest in his stall.

Note VII.

That in a strictly logical process we do not always perceive a result in advance of the expression for it, is illustrated by an incident of my boyhood, and which, at the time (Spring of 1819), I had no idea had any metaphysical significance. I knew that the top of a carriage wheel moved faster than the bottom, and it occurred to me to ascertain the ratio. My thoughts almost immediately took this form. Suppose the carriage is going at the rate of ten miles per hour, then the velocity of the periphery of the wheel round its axis is ten miles per hour, and the bottom point, moving in the direction of the tangent, is (by this motion round its axis) moving backward at the rate of ten miles an hour, while at same time, by the moving of the whole carriage, it is carried forward ten miles per hour. Here are two mo-

tions equal and opposite, and of course there is no motion at all. I was astonished. There was obviously no mistake in the reasoning, and yet the result seemed as obviously false. My confidence in such reasoning was not less than in the stability of the law of gravitation, and if I had seen the rocks about me suddenly move upward, I could not have been more confounded. The relations among the terms had forced me to a conclusion, which I not only had not perceived in advance, but did not believe when I reached it. A little further investigation, however, satisfied me that the conclusion was correct, and enabled me to prove and illustrate it in various ways. I have had much amusement in discussing this problem, having very generally found other persons as much astonished at the result as I had been.

It is a curious fact that people equally confident that the bottom point does move, differ as to whether it moves backward or forward. One evening an acquaintance of mine, then recently converted, got into a warm discussion with some passengers in a Southwestern steamer. They all asserted that the bottom point did move, and some of them, in terms more forcible than urbane, expressed the opinion that only a fool would think it did not. I was within hearing, and being called upon by my friend went to his aid, and said to his excited opponents, "You say the bottom does move?" They promptly answered yes, but some of them added, "or how could it go round on the axle?" while others said, "or how could it keep up with the carriage?" This indicated diversity in their views. I then said, "Pray tell me which way it moves, backward or forward?" This divided them into two very nearly equal parties, each finally insisting that the others were bigger fools than those who said it did not move at all. My friend and myself soon left them, but the next morning we found some of them still wrangling, and that they had several times during the night examined some of the wheels of the engine, the movement of which, each party claimed, practically sustained their po-

sition. Though not germane to the present inquiry, I will add that the simple fact is, that the *whole* wheel is revolving about its bottom point as a centre. The velocity of each point and its direction are easily ascertained. The centre or axis of the wheel, of course, goes forward just as fast as the carriage; the bottom not moving at all, the top of the wheel moves just twice as fast as the carriage. Every point in the ascending side of the periphery moves directly towards what at the instant is the top of the wheel, and every point on the descending side directly from it. The first tendency to motion of the bottom point is directly up, *i. e.*, its direction at its start from the bottom point is perpendicular; though like every other point its velocity and direction are not the same for any time, still the first infinitesimal motion of the bottom point is infinitesimally near to the perpendicular.

NOTE VIII.

The important function of language as the instrument of logic indicates the importance of a thorough knowledge and mastery of all its resources to enable one nicely to discriminate and adapt it as nearly as possible to the finer distinctions and shades of thought which exist in the primitive perceptions of things and ideas, and the delicately varied relations among them, for which, in the logical processes, verbal symbols are substituted.

This consideration gives additional significance to the much mooted question as to the value of linguistic studies, and contributes an additional argument in their favor. In regard to a composite language, formed as ours has been, it seems obvious that without a liberal acquaintance with those languages from which it has been largely derived and in which it has its roots, the knowledge of our own tongue must be very imperfect. Such acquaintance with the sources of our language must have its advantages not only in the all-important respects of greater accuracy in the meaning of the terms, and nicer precision, discrimination, and clearness

in their use, upon which the soundness of our logical conclusions is so dependent, but also in the greater facility and celerity in the mental processes by the aid thus afforded to the memory, the knowledge of a single root or trunk immediately suggesting the numerous branches which spring from it.

The want of such knowledge is perhaps even more felt in stating the results of the logical processes than in their acquisition. In thinking, if at a loss for the proper word, we can for the moment use the mental perception instead; and if in writing we adopted the analogous plan, we should insert a picture of the thing instead of the name of it, as is often done in children's books.

The writer is unable to supplement these *a priori* conclusions with any affirmative experience, and can only say that in using language as an instrument of thought, or for expressing its results, he has felt that he was under disadvantages both as to precision and facility which a fuller knowledge of languages, and especially of their genetic elements, would have obviated.

I have spoken of the resolution of algebraic equations as furnishing the purest type of verbal reasoning. For these a special language has been devised, so flexible that it can be readily and accurately fitted to each particular case.

But the relative advantages of different systems of language, or of other symbols for ideas, is more conspicuous in the greater ease with which we deal even with simple arithmetical problems by means of the Arabic system of notation as compared with the Roman. More extended and intricate calculations, easily accomplished with the former, seem almost impracticable with the latter.

Those who insist most strongly on the supremacy of the logical processes seem most prone to question the utility of the linguistic studies which, in the views I have presented, appear to be most important aids to these same processes.